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INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

HEARINGS BEFORE THE TEMPORARY NATIONAL ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

SEVENTY-SIXTH CONGRESS

FIRST SESSION

PURSUANT TO

Public Resolution No. 113 **(Seventy-fifth Congress)**

AUTHORIZING AND DIRECTING A SELECT COMMITTEE
MAKE A FULL AND COMPLETE STUDY AND INVESTIGA-
TION WITH RESPECT TO THE CONCENTRATION OF
ECONOMIC POWER IN, AND FINANCIAL CONTROL
OVER, PRODUCTION AND DISTRIBUTION
OF GOODS AND SERVICES

PART 5

MONOPOLISTIC PRACTICES IN INDUSTRIES

DEVELOPMENT OF THE BERYLLIUM INDUSTRY

FEBRUARY 28, MARCH 1, 2, 3, 6, 7, 8, AND 14, MAY 8 AND 9, 1939

Printed for the use of the Temporary National Economic Committee



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INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

TUESDAY, FEBRUARY 28, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:15 a. m., pursuant to adjournment on Friday, February 17, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senators O'Mahoney (chairman) and King; Representatives Sumners (vice chairman), Reece, and Williams; Messrs. Davis, Arnold, Thorp, Douglas, O'Connell, Patterson, Hinrichs, and Henderson.

Present also: Federal Trade Commissioners William Ayres and Charles H. March; Willis J. Ballinger, director of studies and economic adviser to Federal Trade Commission; William T. Kelley, chief counsel; Colonel William Chantland, PGad B. Morehouse, and Mr. Walter Wooden, members of legal staff; Mr. Joseph Sheehy, Assistant Chief Examiner; Dr. Francis Walker, Chief Economist, and Colonel William England, Assistant Chief Economist, all of Federal Trade Commission.

The CHAIRMAN. The committee will please come to order.

The committee regrets that Commissioner Ferguson, of the Federal Trade Commission, who is a member of this committee, is confined at home with illness today. In his absence, Judge Davis, also a member of the Federal Trade Commission and alternate member of this committee, will have charge of the hearing which begins this morning. This is a presentation by the Federal Trade Commission.

Judge Davis, do you care to make an opening statement?

Mr. DAVIS. A very brief one, Mr. Chairman.

STATEMENT OF EWIN L. DAVIS, COMMISSIONER OF THE FEDERAL TRADE COMMISSION, WASHINGTON, D. C.

Mr. DAVIS. Mr. Chairman and members of the committee: The Federal Trade Commission was organized soon after the approval, on September 26, 1914, of its enabling act. Under the statute, it took over the experienced staff of economic advisers and investigators of the antecedent Bureau of Corporations.

Congress embodies in the act its expressed intention to preserve the Commission from political character and to maintain a consistent policy of administration. The fulfillment of this policy of detachment is of importance not only with respect to the affiliations of the membership of the Commission itself, not more than three of whom may be of one political party, but also with respect to its legal and economic staffs who have every opportunity, if they desire, to make the work

of the Commission their career without fear of partisan exigencies. Many of them have chosen to do so.

In nearly a quarter of a century of study and endeavor to eliminate restraints of trade and monopolistic practices in interstate commerce the Commission has heard and decided a great body of cases, which are contained in its twenty-odd volumes of published decisions. These cases involved almost every field of industry. Many of the Commission's orders to cease and desist have been reviewed by the courts; and under a recent amendatory act each Federal Trade Commission decision is binding unless respondent shall within 60 days petition for judicial review.

Moreover, the Commission has made more than 100 general or special investigations and studies. These have been conducted for the most part pursuant to congressional resolutions, or on request of the President or the Attorney General.

The Commission has thus studied and submitted one or more reports upon most American industries, including: Bread and flour, cement, coal—anthracite and bituminous, cotton and cotton products, farm implements and machinery, fertilizer, news print and other paper products, petroleum products, lumber, milk, motor vehicles, textiles, tobacco, steel, copper, and meat packing.

Many other investigations and reports may be accurately regarded as having a wider institutional character, including those upon agricultural income (5 reports); chain stores (33 reports, including an analysis of almost every phase of chain-store operation); commercial bribery; cooperative manufacture in foreign countries; cooperative marketing in the United States; cost of living; national wealth and income, industries having base price systems; resale price maintenance; electric and gas utilities (95 reports of the evidence and 6 reports of the Commission's summarization and conclusions of fact and of law, together with its recommendations, were submitted to Congress).

Practically all of the Commission's reports to the Congress were printed as public documents.

The mere publicity of the facts developed in these inquiries generally proved beneficial and often resulted in reforms forced by public sentiment or voluntarily adopted by those who were shown to have engaged in unlawful or unfair practices. Some of these investigations also resulted in prosecutions by the Department of Justice and a number of them resulted in the issuance of complaints by the Federal Trade Commission.

Investigations by the Commission have several times resulted in the enactment of important congressional measures.

The Commission's jurisdictional authority and experience have especially related to monopoly and the concentration of economic power and financial control over the production and distribution of goods; the causes of such concentration and control, and their effect upon competition; and the effect of the existing price policies of industry upon the general level of trade, long-term profits and consumption.

Each of these topics is expressly made a matter of inquiry under Public Resolution 113, pursuant to which this committee is now working.

In the time allotted to the Commission we expect to show the situation in some detail as to competition in several industries. This will be done largely through the results of investigations heretofore made by the Commission into conditions in these industries, partly through documents from various sources on file with the Commission and, to a limited extent, through expert and factual witnesses.

The difficulties which would be entailed in a detailed presentation of the basic evidence before this committee are apparent from the fact that in a proceeding by the Commission against but one, though the leading, steel producer (the *Pittsburgh Plus* case of 1924), about 18,000 pages of oral testimony and 23 large volumes of exhibits were received in evidence. In a case now being tried by the Commission against the Cement Institute and some 75 producers, about 2,800 exhibits and 18,000 pages of oral evidence have been already received before completion of the Commission's opening case. In some Commission cases hundreds of witnesses have been heard.

To hear the case of a single industry of importance, to say nothing of the reception of proof as to many industries, would doubtless consume more time than the busy members of this committee would be able to devote thereto.

Therefore, it seems to us best to place at the disposal of the committee the situation as we have found it to be in certain of the industries impartially studied by the Commission.

The Federal Trade Commission is unanimous in a desire to aid the committee to the utmost of its ability, both in connection with the hearing of its representatives and in such other manner as the committee may suggest.

The CHAIRMAN. Now Judge Davis, who is to be your first witness?

Mr. DAVIS. Mr. Chairman, Mr. Willis J. Ballinger, who has had general charge of the preparation of the material of the Commission for presentation to the committee, will be heard first.

Representative SUMNERS. Judge Davis, I would like to ask you a question. In your preparation of this particular presentation, to what degree were you able to depend upon material already accumulated in your department?

Mr. DAVIS. Well, as it will later be more definitely shown, Congressman Sumners, to a very large extent. We have supplemented and brought down to date in some respects the material which had already been gathered in regular official investigations of the Commission or cases tried by the Commission.

Representative SUMNERS. Mr. Chairman, may I say that the Committee on the Judiciary is meeting on an important matter at 10:30 and I am going to have to go back over there now but I will get back over here as soon as possible.

The CHAIRMAN. We will excuse you, but regretfully.

All right, Judge Davis, will you be good enough to proceed?

Mr. DAVIS. Mr. Ballinger, will you proceed in your own way, in making a statement as you desire in connection with the presentation of the Commission.

**STATEMENT OF WILLIS J. BALLINGER, DIRECTOR OF STUDIES AND
ECONOMIC ADVISOR TO THE FEDERAL TRADE COMMISSION,
WASHINGTON, D. C.**

PRESENTATION OF FEDERAL TRADE COMMISSION STUDY

MR. BALLINGER. Mr. Chairman and members of the Committee: The Federal Trade Commission has been requested by the Temporary National Economic Committee to assist in the study of monopoly and monopolistic practices found in American industry.

THE CHAIRMAN. May I interrupt you here merely to ask that it may be recorded in the record that you are Willis J. Ballinger, Director of Studies for the Federal Trade Commission, in pursuance of the work of this committee.

MR. BALLINGER. For the purpose of a preliminary survey the Commission is presenting the following testimony.

The presentation is in three parts, a prologue, a general summary of Federal Trade Commission experience over the past 7 years, and an account of monopolistic conditions existing in 13 industries at the present time.

In the prologue, the Commission offers its definition of the problem at hand, involving the sense in which it will use the terms "capitalism," "monopoly," and "competition." This section deals also with the relation of free capitalism to democracy as a background for the discussion of actual restrictions to freedom as found in business practices. Testimony will be introduced showing in addition the relation between monopoly and the failure of business to recover full prosperity.

Part 2 deals with the recent experience of the Commission in the enforcement of the antitrust laws. The testimony will indicate the kinds of monopolistic practices uncovered by the Commission in numerous cases and in its general investigations. Particular attention will be given to the investigations covering public utilities, farm machinery, chain stores, and agricultural income. The obstacles encountered in attempting to protect competition will be indicated, and the reasons for the failure of section 7 of the Clayton Act to accomplish its purpose. Section 7 was designed to prevent the concentration of the control of production in industry and to prohibit one of the principal methods by which monopolistic practices are greatly facilitated.

Part 3 presents a series of 13 examples of important industries, showing the existence of monopolistic practices at the present time. Our budget and the time available have not permitted us to give, at this time, as complete a picture of the extent of monopolistic conditions in American industry as exists.

In selecting these examples we have tried first of all to obtain illustrations of different varieties of monopoly. We have also endeavored to select industries that are of immediate interest to large groups of people. Some of them directly affect the consumer, others provide materials to a multitude of small industries, and still others are of primary interest to the producers of raw materials who must sell in a market where monopolies are apparently the only buyers. Cases of double monopoly occur, where the industry controls both the raw material prices which it pays and the prices at which it sells its product. These examples will also indicate the fact that at times a raw

material may pass through several layers of monopoly before reaching the final consumer who must pay the costs of all these interferences with competitive trade. Finally, the Commission has selected examples of both large and small industries, to illustrate the fact that bigness and monopoly, although often related, are not always found together.

In this investigation, the Commission is not primarily interested in the legality or illegality of the practices or conditions described. In the Commission's opinion, one of the gravest problems before the Temporary National Economic Committee is one of recommending suitable changes in our present laws which will lead to an effective encouragement and protection to free initiative in business. Many of the present antitrust laws were aimed at the crude monopolistic practices of an earlier day, chiefly the acquisition of ownership of competitors, or collusion and conspiracy to refrain from competition. The proof of collusion and conspiracy has always been difficult. With the passing years, the difficulties have increased enormously. Today there are more subtle ways of restraining trade, where the difficulties of proving any conspiracy or collusion are frequently baffling. In law a monopolistic practice is one that can be proved to be a violation of existing law. To economic science, however, a monopolistic practice is one that interferes with the flow of free and fair competition in industry, even though the practice or condition may be unreachable by existing law.

When the economist sees prices stubbornly resisting the influence of falling demand, holding steadily to a high level while production shrinks almost to nothing, he knows that competition has ceased to work at that point, though proof of any conspiracy to fix prices may be impossible or exceedingly precarious. When he sees technical improvements reducing costs in an industry, with no corresponding reduction in the price of the product, he knows that something is there that is not good for the health of the competitive system. When he finds the Government is confronted with a number of bids, presumed to be secret, all identical to the last cent, it is clear to him that some obstruction is lodged in the arteries of trade. When he finds in industries excessive profits and inflexible prices, or excessive production and inflexible prices, or rising prices and falling costs of production over a long period of time, he knows that monopolistic conditions are present, even though the detection of any conspiracy to restrain the law of supply and demand may be hopeless or extremely difficult.

It is the Commission's opinion that the disease which it characterizes as restraints of trade in sundry form is equally fatal to American capitalism, whether it originates in the overt act of an individual, in any encouragement offered by Government itself, or in a contagious virus that cannot be located by any existing microscope of the law.

The first fact that must be recognized as the basic cause of the present investigation is that the laws against monopoly, beginning in 1890, as generally construed by the courts, have proved ineffective in preventing the steady growth of monopolistic practices in American industry.

In the opinion of the Commission, the chief obstacle to a clear analysis of the problems of monopoly will be found in the confusion of terms, the use of such words as capitalism, monopoly, and competition, with two or more incompatible meanings at the same time.

This difficulty cannot be easily and quickly overcome by setting down a list of standard definitions. The acceptance of practical definitions of the subject must be built up by detailed examination of many lines of industry, each with its own peculiarities of circumstance and behavior. In advance we can only suggest the objective toward which the Commission believes the discussion should be aimed.

Capitalism is often used to describe several different aspects of a business system, such as the fact that capital investment is employed in production, or that the means of production are privately owned. So far as the first of these definitions is concerned, it applies equally to Fascist, Communist, and monopolistic systems of industry, all of which use machinery and fixed capital. For the purposes of the present discussion such a definition leads nowhere. The Commission desires to make plain that the aspect of capitalism which is here under examination relates to the competitive relationship among producers and consumers operating for their own interest in the hope of economic gain.

Capitalism and democracy, to the man in the street, appear to have been developments of the last 150 years. Sometimes he remembers vaguely that the Greeks had a word for democracy, but students are aware that for thousands of years capitalism and democracy have been partners in a long and indecisive struggle for human liberty. Our own experience in America has been only one instance of the vicissitudes of the partners, capitalism and democracy. To realize that capitalistic systems have risen, flourished, and perished many times before the coming of modern capitalism, it is necessary to know that capitalism can exist without automobiles, radios, or giant corporations utilizing costly and complex machinery for the production of goods. We must not confuse technology or variety of production with the capitalistic system itself and think that modern capitalism is something brand new because it has introduced tremendous improvements in the production and distribution of goods. Stripped of its superior technological equipment, modern capitalism is essentially the same as capitalistic systems which appeared and disappeared thousands of years ago—theoretically a system of free markets, where any man may sell his labor or his products according to the laws of supply and demand. Reasonable freedom of initiative and a fair chance to compete in the market are the essence of capitalism, and democracy is the traditional method by which people have tried to protect this freedom against the excessively predatory man.

There are many examples of free markets developing and democracy organizing itself to ward off robber bands and hostile neighbors. With organization, however, came the opportunity for peaceful exploitation from within. Almost at once we see the beginning of interference with free trade by what we now call rackets, and soon by organized controls operated by powerful private interests. Sometimes interference with the free market was vested in a rich merchant, or society of merchants, sometimes in a guild, sometimes in a feudal lord.

In one way or another the system of free competition is broken down. Trade is limited and confined, sometimes for centuries that later historians will call "dark ages." For a time democracy prevailed and drove back predatory businessmen. In the end a few men found means of standing legally across the market and taking toll, democracy went under and the victors fattened on the market until they

destroyed it, and through the concentration of wealth established tyranny. Frequently the burden of economic parasitism became too great for the industry of the people to carry; a war or revolution broke down the ruling class, or the discovery of new lands offered an escape for the downtrodden, and capitalism, the system of free market, appeared again to begin a new cycle. The long battle between trade and the tribute taking has gone in cycles of victory and defeat. Through the centuries the struggle of capitalism and democracy against the ancient craft of toll taking has swung to and fro. Free enterprise has risen and perhaps for many generations had defended itself with the ballot box against the growth of concentrated economic power which devours capitalism by seizing markets through the power of money, destroys free enterprise, and takes tribute at every corner. Then in a day of weakness democracy has been seduced or conquered, and wealth has taken control of industry and trade.

Sapped by the growth of plutocracy, civilization has burst into a feverish orgy of degeneracy and crime and has then sunk into a long dark age until there came a new birth of freedom and the beginning of a new struggle.

Modern capitalism was the revolt of producers and consumers against the highway robbery of the feudal lords. It was another flag of freedom appearing after a long night of concentrated economic power and political tyranny. Men would band together to work and trade with one another and to fight off the oppressor. But, as capitalism developed, the old barons came back in new forms. In the towns where modern capitalism began its struggle with the feudal order, the new free market system eventually degenerated into a completely plutocratic and monopolistic guild system. Democracy and capitalism were trapped once more. Then capitalism escaped for a brief moment to the countryside—to country fairs and auctions where free enterprise began anew, and what a man made he could sell and put the profit in his pocket. But very quickly the spark of free enterprise was snuffed out by the King who embarked on the royal business of selling monopolies to favorites and insiders. Free trade vanished once more until the coming of the industrial revolution.

Here on American soil another stretch of free enterprise has precipitated the old historic struggle—the efforts of democracy to save its partner, capitalism, from its ancient foe, predatory business practices which destroy free enterprise.

Lest the people learn the lesson of history, the dark powers of concentrated wealth choose in each new struggle a new name for themselves, avoiding the old names that carry the historic smell of tyranny. Tyrant, satrap, pharaoh, khan, caesar, emperor, czar, and kaiser have left their sulphurous trail across the pages of history. Today in Europe they have new names. In America we call the lesser rulers "business leaders" and "corporation lawyers," the great ones are simply kings—oil kings, match kings, soap kings—hundreds of them. The great overlord who will draw them all together into a perfect plutocratic dictatorship has not yet appeared. But there are portents in the heavens which betoken his opportunity.

History seems to indicate that in the end democracy has always been destroyed as the free competitive markets of capitalism have been overcome by predatory business practices. Each new capitalistic system has been like a man passing through life among the in-

visible germs of fatal disease until at last one of the arrows of death gets him and he dies. Every time a democratic people succeeds in beating back the powers of high finance, protecting fair competition, and preventing the operation of special privilege, capitalism and freedom are saved for the moment. The next moment the danger appears again from some new quarter and must be once more repelled.

There is no evidence, however, that capitalism and democracy are limited to a certain length of life by natural law. When they die, their deathbed is always laid in the midst of palatines and slums and concentrated economic power. The natural law appears to be that the price of freedom is eternal vigilance against the growth of such concentrated economic power.

The question whether capitalism in the world at large has now reached another autumn, the beginning of a long winter of darkness and stagnation, is hardly an academic one. Some of the greatest industrial areas of the earth are already organized in dark-age forms. Freedom has been not merely lost, but repudiated and cast out. The future, abroad at least, so far as we can see, points toward destruction rather than toward new triumphs of progress and improvements in the standard of living.

Our country has slipped down from a precarious peak of prosperity into a long plateau of depression. The question is a vital one, whether we are at the end of our growth as a free democracy. If the answer is that our dream of freedom is over, it will not be on account of the conquering power of distant enemies but because of the same internal disease that has destroyed capitalism in the past and in other parts of the world during the present century. Our duty here is to locate that aspect of capitalism that is vital to freedom, and to find the means by which that vital element may be preserved and cultivated.

In examining the operation of our present system of trade, the Commission believes that competition must be regarded in the light of the effects that are desired. To avoid degeneration into totalitarian controls, something that we know as free initiative must be permitted and encouraged. The details of business enterprise, of risk and adventure, must in some substantial degree be the free action of individuals operating in a system of fair competition. To preserve a field of free action there must be safeguards that will prevent the growth of powers that are destructive of such freedom.

Whatever the details of the obstructions to trade that will be found by the Economic Committee, for the present the Commission lumps them together in this discussion as being varieties of monopoly.

The Commission believes that whatever may have been the immediate causes of the present depression, the effects have been aggravated by the lethargy of the capitalistic system, a lethargy due to a steady growth of monopolistic practices in American industry and trade. The failure of controlled prices to follow the falling market in 1930 was apparently a factor in prolonging and deepening the collapse of production and employment.

Artificially high prices appear to have been a factor in the unwholesome lack of buying power that has so long interfered with recovery. In 1936 and 1937, it seems that artificial and excessive increases in prices were in part responsible for limiting the growth of prosperity and turning the curve of production downward.

The fact appears to be established that price and production controls, set up in the hope of obtaining larger profits at the expense of the business system as a whole, have succeeded in so poisoning the whole system so as to defeat even their own purposes. A cancer may live successfully at the expense of the body of its victim only until it kills the body and dies with it. There appear to be symptoms indicating that monopoly has so far weakened the body of capitalism that both are in danger of dissolution, to be followed, perhaps, as in other nations, by some kind of authoritarian social order which would be highly distasteful to the American people.

The remarkable difficulty of economic recovery, and the ominous developments abroad, indicate the need for serious investigation and action to relieve capitalism of as much as possible of the deadening effects of trade restraints. Other measures may also be necessary, but no program of recovery will restore a healthy capitalism if it fails to include a restoration of healthy competition in industry.

The Commission desires to make clear its assumption that the resolution establishing the Temporary National Economic Committee directs the committee to seek for means of protecting free and fair competition, not for means of giving it a decent burial. The Federal Trade Commission, in the course of its work, has become familiar with the existence of a sentiment favoring a relaxation of the laws against monopoly. Proposals are constantly made, and no doubt will be made again, for the organization of price and production controls under public sanction, with the purpose of creating monopolies in industries where they do not now exist, or of sanctioning them where they exist by evasion of the law.

The Commission stands unalterably opposed to any general legislation permitting the organized control of prices and production by private business. It subscribes fully to the viewpoint of a distinguished American jurist and social philosopher, Justice Brandeis, when he said some years ago,

You cannot have true American citizenship, you cannot preserve political liberty, you cannot secure American standards of living unless some degree of industrial liberty accompanies it. And the United States Steel Corporation and these other trusts have stabbed industrial liberty in the back. They have crushed it out among large groups of our people so completely that it will require years to restore our industries to a condition of health.

The Commission recognizes that in some industries technological necessity or national defense may require the establishment of legal monopoly; but this development should be kept, in the Commission's opinion, to as narrow limits as possible. Public utilities do not belong, theoretically, in a free capitalistic system; they necessarily land in Government regulation, and some of them already have landed in public ownership.

For the great bulk of American industry and business in which no technical necessity or other unusual circumstance for monopoly exists, the Commission holds that free competition, protected against unfair practices, is essential. In order to preserve capitalism and democracy, we do not have to keep absolutely every business in a free form, but we have to keep enough free business to make this in general a free country.

If, in an effort to prevent unfair practices, free business is permitted to organize and establish its own rules of action, the result will inevitably be to cover all business into a monopoly system. This road

leads directly to some form of authoritarian government. The abandonment of free capitalism here, as in other nations, will require the abandonment of democracy. The Commission suggests, therefore, that this committee will do well to oppose any attempt that may be made to obtain its sanction for laws looking to the organization of free industries for price and production control.

Finally the Commission feels it to be vital to the success of this investigation to recognize that recovery at any price will not satisfy the needs of the situation. We may be tempted to abandon all hope of restoring capitalism and to resort to a mere recovery of production and employment in the shelter of an authoritative governmental system of planned industry. The Commission does not regard such an outcome as one to be desired. On the contrary, the question is one of restoring a degree of flexibility and vitality to the capitalistic system that will allow full prosperity with freedom. To kill the patient and substitute someone else is not a satisfactory cure. Indeed, it feels that such a cure would be fraught with the greatest peril to the real economic progress of the American people in the years to come. It is in competitive markets that mankind has made his greatest progress, and the words of Woodrow Wilson written many years ago are a sound admonition to all civilizations that seek to rise to higher levels of economic achievement.

American industry has always thriven, when it has thriven at all, on freedom; it has never thriven on monopoly. Limit individual opportunity, restrict the field of originaive achievement, and you have cut out the heart and root of all prosperity. You cannot use monopoly in order to serve a free people. We purpose to prevent private monopoly by law, to see to it that the methods by which monopoly are built up are legally made impossible. We design that private limitations on individual enterprise shall be removed so that the next generation of youngsters, as they come along, will not have to become protégés of trusts but will be free to go about making their own lives what they will.

Mr. DAVIS. Mr. Chairman, I would like to ask permission to have Mr. Ballinger present the witnesses.

Senator KING. May I ask Mr. Ballinger one question? I gather from your exposition this morning that you would not think it would be inconsistent to have planned economy, that planning being done by the Government or by bureaucratic agencies.

Mr. BALLINGER. Yes.

Senator KING. In other words, you believe in the right of initiative of the individual and desire that they should have a free field in which to operate.

Mr. BALLINGER. I believe business decisions should be made by businessmen operating under a system of rules protecting fair competition.

Senator KING. You are not advocating, as I interpret your address this morning, a revival of the N. R. A.¹

Mr. BALLINGER. No.

Senator KING. Along with its wretchedness, irregularities, and oppression.

Mr. BALLINGER. That would be the end of American democracy.

Professor Fetter, will you take the stand? Will you state your name for the record?

Professor FETTER. Frank A. Fetter.

(The witness was duly sworn by the Chairman.)

¹ National Recovery Administration.

TESTIMONY OF FRANK A. FETTER, RETIRED PROFESSOR OF ECONOMICS, PRINCETON, N. J.

Mr. BALLINGER. What is your present occupation?

Professor FETTER. Retired teacher.

Mr. BALLINGER. At what universities did you teach?

Professor FETTER. I taught successively at Indiana University, Stanford University, Cornell, Princeton.

Mr. BALLINGER. How many years were you professor at Princeton?

Professor FETTER. Twenty—1911–1931.

Senator KING. I think we all know Professor Fetter. He has written one of the ablest books I have read in my life.

Mr. BALLINGER. All I want to say, Senator, is that I am presenting, as the first witness of the Federal Trade Commission, a man who has devoted a lifetime to the study of monopoly.

The CHAIRMAN. Let's get the name of that book in the record.

Mr. BALLINGER. "The Masquerade of Monopoly."

The CHAIRMAN. You may proceed, Professor Fetter.

Professor FETTER. Gentlemen, I have been asked to open the prologue of this portion of the monopoly hearings, and the purpose of my comparatively brief discussion is to consider the fundamental nature of monopoly, and of competition in relation to our contemporary problems of business organization and price policy. I am quite conscious of the fact that in its general nature what I shall say is distinctly academic. Of course, as an old teacher I use that in a rather favorable sense of the term, and I expect some sympathy from several members of the committee here because they, too, have been tarred with that stick. There is another sense of the term "academic" which we shall abjure, I am sure.

The service of anything I may say, if there is any service, is in the nature of a signpost. One cannot be said to be making much mileage when he stops to read the signpost; he is losing time. But if he doesn't stop to read the signpost and takes the wrong road, the faster he travels the farther he is from home, and the whole history of the monopoly problem throughout the ages is full of lessons in that matter.

Tremendous confusion is caused by different meanings of words. In law and in civil conversation a large part of our differences consists of word differences. The words "monopoly" and "competition" are used in various senses by the courts, by men in business, and by legislators discussing the matter as you are discussing it here. There is need to get some perspective on the subject, and I question whether we are, comparatively, losing time if we glance at the history and development of the forms of behavior which we describe as monopolistic or competitive.

I freely admit that very much of this sort of thing might become a waste of your time. It is like a pinch of salt which is of advantage only if it is used in great moderation.

HISTORY OF MONOPOLY

Professor FETTER. The thing "monopoly," if not the name, is doubtless as old as human society, as economic organization, as the exchange of goods. It doubtless appears, certain phases of it, in the Code of Hammurabi. It was doubtless common in Babylon, and we have

direct evidence of it in ancient Egypt. But the first use of this word as it occurs in the Greek that has been discovered is found in Aristotle's *Politics*, at the date of 347 B. C. It is a derivative of two Greek roots, "monos," alone, and "polei," to sell; and it occurs in the Greek in two forms, feminine and neuter, "monopolia" and "monopolion." The Romans took the neuter form of the term over into Latin.

Now as it occurred among Greeks three or four centuries before Christ it meant one of three things, and, connected by a certain common nature, the exclusive sale by a city or state, that is state monopoly, T. V. A., perhaps; second, the exclusive right granted to a private person, the exclusive legal right granted by a city to a private person to carry on trade; and, third, the exclusive power of an individual to control the supply of goods. That is the sense in which Aristotle first refers to it, as to a man who bought up all the oil presses and in a fruitful year was able to exact a great tribute. Thus there were monopolies of all kinds in the days of the Ptolemies in Egypt, and in Greece, and they began to appear rapidly in the Roman republic.

We need only to add another variation to have about everything that we can think of today under monopoly, namely the union of a number of persons by combination or inclusion, and there you would have the four different varieties that pretty nearly cover the whole field of monopoly today.

The Romans seem to have been largely free from monopoly until the days of the Empire. They had a pretty well developed system of free capitalism excepting, of course, as it was affected by the institution of slavery. The use of the term "monopoly" in Latin was by the Emperor Tiberius who introduced the word with an apology, as being a new word unfamiliar to the Roman ears.

The naturalist Pliny, in the year A. D. 79, records the frequent complaints of the citizens against the exactions of monopoly and then increasingly as the Roman power in the west declined, in the third and fourth centuries, monopolies were created by grant of government and sold to private citizens as a means of replenishing the imperial treasury—very remindful of some of our political contributions today.

In browsing through literature on the subject I came across this statement which seems to have been the original form of the Sherman Act:

We command that no one may presume to exercise a monopoly of any kind of clothing or of fish or of any other things serving for food, or for any other use, whatever its nature may be, either of his own authority or under any rescript of an Emperor already procured or that may hereafter be procured, or under an imperial decree, or under a rescript signed by our Majesty; nor may any persons combine or agree in unlawful meetings that different kinds of merchandise may not be sold at a less price than they may have agreed upon among themselves; and if anyone shall presume to practice a monopoly, let his property be forfeited and himself condemned to perpetual exile.

You see, we have softened the terms of the Sherman Act considerably.

And, in regard to the principals of other professions, if they shall venture in the future to fix a price upon their merchandise and to bind themselves by agreement not to sell at a lower price, let them be condemned to pay 40 pounds of gold

an enormous sum, of course, in that day.

This sounds exceedingly modern, but it was an edict of the Emperor Zeno 1407 years before the Sherman Act, in the year A. D. 483. This was included just 50 years later in the Code of Justinian, 533,

revised and issued again in 534, and continued until the downfall of the Eastern Roman Empire, to be a part of Roman law. It had its influence more or less on all the civil codes of Europe.

Everywhere that the exchange of goods occurs, monopoly appears there in some form and in some degree. One American writer said, in essence, "Monopolizing represents an effort to avoid taking chances," or we might say, in essence monopoly represents some form of specific power or privilege in the sale or purchase of goods. It is the effort of some traders to get more favorable terms and higher prices, or to render less service by excluding or softening competition of other traders. It is universal, it is insidious, it is all pervasive, and tends always to become intermingled with political action and social privileges.

The general moral, then, of all this, is that monopoly is both ancient and ubiquitous. There is nothing surprisingly original about this committee. It is not the first time that statesmen have gathered together to try to find some remedy for this problem, and it will not be the last time in human history.

The CHAIRMAN. You are not very encouraging, Professor.

Professor FETTER. I thought—a little modesty is always well, you know, at the beginning of a great task.

Now a few words regarding the historical development in mediæval and modern times. In feudal times—I mean by that from the year about 800 to 1000 as the depth of the Dark Ages—monopoly as a fact flourished in many forms, but the word monopoly had been lost even in the mediæval Latin, and it did not recur until a renewed study of the Greek literature in the thirteenth century. DuCagne, the Latin lexicographer, records it as of 1268.

Feudal monopolies consisted in exclusive rights granted usually by the crown to nobles, monasteries, corporations, important individuals, for fishing, salt mining, ferries, gristmills, and many other kinds of activities, and this is the source and basis undoubtedly of our laws of common carriers and of our laws regarding industries that are affected by a public interest.

That was more or less the crucial test that the industry was monopolistic, and therefore was subject to special kind of control.

In England the word monopoly was first used by Sir Thomas Moore in the Latin in his *Utopia* in 1516, and again in English in a later work in 1534, and it was destined to have a very large part in the discussions of England during the ensuing century, and until the time of the Puritan Revolution and Cromwell. Indeed, the issue of monopoly between the years 1597 and 1640 was quite fundamental in the causes leading to the beheading of Charles I, and later was very fundamental undoubtedly in bringing on and accentuating the horrors of the French Revolution.

Paraphrasing the words of Patrick Henry, let George III profit by their example.

In 1597 the Parliament courageously opposed the granting by Queen Elizabeth of patent monopolies. In 1603 the famous case of *Garcy v. Allen* declared such a patent, for the making of such a simple thing as playing cards, void as against the common law, and the reasons given by the court sound very modern indeed: first, that it makes prices dearer to the buyer; and, second, that it deprives workmen of their employment.

In 1624 was passed the statute of monopolies forbidding granting by the Crown of exclusive right of trade, and this statute did not apply, however, to Crown patents for new inventions or to grants made by Parliament, and to certain other ancient grants and privileges.

Particular significance attaches to these episodes between 1597 and 1624, and for that I dwelt upon them somewhat, because they served to impress upon the Anglo-Saxon law and upon the minds of the judges and lawyers a somewhat narrow conception of monopoly as an exclusive political grant. The lawyers think of that as the primary meaning of monopoly from which the broader meanings have developed. On the contrary, for thousands of years the word "monopoly" had had the broader meaning; and the particular historical chance discussion in the time of Queen Elizabeth gave to the English law this narrower conception. The economic conception of monopoly has continued in the past 200 years to bear the broader meaning, not of an absolute, unlimited, exclusive power to sell, which is of a political nature, but also as a relative limited power to restrict supply, bounded on all sides by potential competition and substitution and a multitude of things. The concept of absolute monopoly is hardly conceivable in the economic sense, but monopoly is essentially a policy of scarcity, of reducing supply, of decreasing the number of sellers, and decreasing their independent action in selling as opposed to competition as a policy of production and plenty.

The Einstein doctrine of relativity applies very fully to the whole concept of monopoly. It is relative. It shades off by gradations and a great deal of the controversy comes from one person thinking of it as an absolute, 100 percent, quality, and the other thinking of it as a modified, limited quality, and undoubtedly some of the difficulties of the court—I say this as a layman who has industriously studied many of these decisions from an economic standpoint—seem to begin through conceiving of a monopoly as an absolute thing, and if they found 30 percent or 40 percent or 50 percent of the industry outside of monopoly, then there was no monopoly at all. It was not absolute.

Now, competition is in a sense the counterpart of monopoly. The Supreme Court has said in the so-called *Harriman case*, (226 U. S. 61, *Union Pacific Railroad*), "To compete is to strive for something which another is actively seeking and wishes to gain."—Justice Day speaking for a unanimous court.

MEANING AND APPLICATIONS OF COMPETITION

Professor FETTER. From its derivation the word "competition" has a broad and general meaning and numerous applications. It is, to rephrase it, a rivalry to excel in some activity or to attain some specific end. As far as mere etymology goes, the word "cooperation" and the word "competition" are almost interchangeable, and they are frequently confused in discussion, but they have taken diametrically opposite directions in their development. When you cooperate, you work along with a person, expecting to divide the results. When you compete, you work against that person, not necessarily in a hostile or mean or injurious sense, but you work against that person in order to get the result yourself.

In the theory of biological evolution plants and animals compete both as individuals and as species for their place on the earth. In

human society there may be competition on the physical plane, the mental plane, legal plane, economic plane, and other planes between individuals and groups of individuals. This competition may be friendly or unfriendly; it may be for pleasure, for sport, in games, or to injure or destroy. Consequently, the word "competition" must always be used with great circumspection, with limitations and explanations. It is determined by its context, by the purposes for which it is being used.

All competition in human society is more or less regulated and must be, the rules being adopted for the purpose designed in the competition. For example, in running as in other sports, there is need for referees, umpires and judges, who have to call fouls. Most criminal laws prohibit certain kinds of competition, prevent the stronger man from beating the other one on the head, and a large part of our civil law having to do with fraud and other methods of carrying on business are directed to the same end.

Just a word regarding a misleading identification of economic competition with laissez faire, or noninterference, which has become very common. This is a result of a purely historical accident. In the eighteenth century the way toward better competition was the abolition of large numbers of existing medieval, and many of them feudal, privileges. Consequently, those favoring competition were always favoring the cessation of interference by government. But under other conditions competition can only be preserved by certain kinds of interference; the rules of the game that I have been speaking of must be laid down, and through all the Middle Ages in the growth of trade in towns of Western Europe there were many rules directed toward enforcing competition, making the sale of goods impossible outside of certain organized markets and without following certain rules.

And that brings us to the question, very fundamental certainly to the work of the Federal Trade Commission, of fair and unfair competition. These terms are comparatively recent in our law and in popular speech, but the actions they denote have always been recognized in any concept of competition and must be.

Fair competition, most simply defined it seems to me, means in accord with the rules of the game, and unfair competition is outside of the rules of the game, breaking the rules of the game. Business competition has the purpose of any socialized competition. It is to find who can do best something which it is to the benefit of society, that is, of one's fellowmen, to have done and to have done as well as possible. Competition is fair when it is for a good purpose and, secondly, when it is done according to the rules of law and morality. Fair competition is competition that is channeled in the direction that is good for society.

THE CHAIRMAN. Doesn't that all depend upon what the nature of the rule is?

Professor FETTER. I am not sure just what you have in mind, Senator, but I admit that pressure groups and organized interests are often able to persuade society to make a rule and channel competition in wrong lines.

THE CHAIRMAN. That is exactly what I mean, so that the broad statement that the preservation of competition can be secured by

enforcing the rules of the game is perhaps just a little bit broader than we might want to make.

Professor FETTER. I have made it subject to qualification which your question has brought out, Senator; yes. Differing judgments of competition result from differing meanings attached to the word; that is, whether competition means all kinds of competition, fair and unfair, or secondly, only fair competition. Those who praise competition usually are thinking of the good that is done by fair competition, and those who damn competition, or who disparage it, are thinking of the evil that is done by unfair competition, and their minds are not meeting at all. They are just at cross-purposes. For instance, there is the odium that has lately attached to competition as summed up in the term "cutthroat competition." Now this term has undergone several changes of meaning. It originally meant, I think, selling goods not to make a profit on a particular sale but to ruin a competitor if possible, and more lately it's been transferred to desperate competition among very poor and weak competitors, but I still think that the original meaning is the sound one.

It is as if Cunningham, for example, would say: "I am tired of competing with San Romani. He will beat me some day; he is crowding me pretty close. So some day when we are going around the corner of the track a good piece away from the judges I will hamstring him or I will jab him in the ribs and break a rib or two." That is not competition; that is not fair competition in the thing set for competition, namely, to decide who is the better runner—far from suggesting Cunningham would ever even think of this; good sportsmanship prevents it.

Any kind of discrimination in prices—here we come to something more vital—can easily run into unfair competition, very difficult to detect even when becoming some form of cutthroat competition. The complications of modern business have greatly enlarged the field of possibly unfair acts of competition and have called for much more careful policing of the highways of business than was necessary in simple business conditions where everybody knew each other and all were dealing with neighbors. This is what led, I believe, fundamentally to the creation of the Federal Trade Commission in 1914.

Now, as regards the definition of competition itself, it seems to me we are interested mainly in what we may call effective competition, competition that actually takes place or can take place. In order that competition shall be effective there are three conditions necessary: First, ability to compete. A man with one leg would hardly think of competing in a 100-yard dash; he would find something else that he could do of a different sort, and so for every kind of competition there is a fundamental fitness which will determine whether the man is anywhere within striking distance of competition. That is an economic or physical or objective condition, not a legal condition at all.

Secondly, there is the willingness to compete, and a person might be able to compete and yet not have the willingness to compete. There are many reasons for that; he likes something better, what the economist calls the comparative advantage; he can do this thing better than the other man, but he doesn't care to do it. He wants to do something else which he thinks he can do still better.

Thirdly, there is the freedom to compete, and this is the political condition relating to the personal liberty of the individual who is able to compete and who is willing and desirous of competing, and right here lies by far the greater part of the problem that faces this committee, in my judgment. It is the political aspect, and by "political aspect" I mean in the broadest sense the liberty of the citizen which may be limited both by explicit political authority and by the illegal, illicit action of some of his fellowmen, the extralegal or illegal interference which we have in so many rackets of one sort or another.

Now most of the problems in the control of monopoly and regulation of competition relate to this political factor, the freedom to compete. In numerous ways political authorities interfere directly or indirectly with the freedom of the individual. It is to that, I think, the Senator was referring a few minutes ago in his question. In other ways private, voluntary organizations more or less aided by public action create areas of special privilege from which genuine competition is practically or wholly shut out. Government abets and creates monopoly whenever it fails to give full police protection to citizens who are being molested in their private rights.

Senator KING. May I interrupt you? The Government—has it not?—has not only encouraged but admitted monopoly among agriculturists and laborers in the formation of the unions and organizations for the increase of wages and to secure certain betterments; in other words, they have been exempted in the antitrust law and in the other trade acts which have been passed by Congress?

Professor FETTER. In fact, I think the answer must be "yes," but labor organizations have other purposes that aren't merely monopolistic purposes, and up to a certain point a disinterested student may look upon the labor organization as merely redressing the balance, so to speak, where there has been a buying monopoly for labor, but all history proves that labor organization frequently goes beyond that, and then it is monopoly just as clearly as is capitalistic monopoly.

Senator KING. I am not complaining against the exemptions of certain industries and organizations from the applications of the antitrust laws. In fact, I think the best interests of society would protect the agriculturist, the farmers, in some form of monopolistic control of their commodities, the same as labor.

Professor FETTER. Willingness to compete is a part of the problem also in this respect, that men are also willing to monopolize, and whenever they can make more by monopolizing than they can by competing, they are not willing to compete.

The CHAIRMAN. Would it interrupt you if at this point—in order to illustrate the colloquy between yourself and Senator King—if I should read into the record section 6 of the Clayton Act, which is the act of October 15, 1914, and to which I think Senator King was referring. It reads as follows:

That the labor of a human being is not a commodity or article of commerce. Nothing contained in the antitrust laws shall be construed to forbid the existence and operation of labor, agricultural, or horticultural organizations instituted for the purpose of mutual help and not having capital stock, or conducted for profits, or to forbid or restrain individual members of such organizations from lawfully carrying out the legitimate objects thereof; nor shall such organizations or the members thereof be held or construed to be illegal combinations or conspiracies in restraint of trade under the antitrust laws.

I think that is the section——

Senator KING (interposing). Yes; in the Clayton Act, and the exemption or the relations which were therein set forth.

The CHAIRMAN. And, of course, later on Congress passed the so-called Webb-Pomerene Act, the purpose of which was to grant an exemption from the antitrust law to all forms of export trade; in other words, combinations in restraint of trade were to be permitted in respect to trading with foreign countries though forbidden with respect to trade within the United States.

Senator KING. To bring the matter down to date, Congress subsequently passed the so-called Miller-Tydings bill which specifically abrogates the antitrust laws in respect to certain transactions.

The CHAIRMAN. In other words, an examination of the laws which have been passed by Congress during the last 50 years with respect to interstate and foreign commerce reveals a tendency to switch from one side of the road to the other side of the road; as, for example, when the N. R. A. was passed, exemption from the antitrust law was granted to all forms of combinations among businessmen and industrial corporations.

Professor FETTER. Senator, it is not a highly original remark for me to make—that even Congress may play with words.

The CHAIRMAN. I think it does. Even Members of the Senate and Members of the House as well as professors.

Professor FETTER. We all do. The statement that labor is not a commodity, is perhaps good politics, but it isn't good economics. Commodity means something that is useful and valuable, as the service performed by a man, which is labor. You see, we use the term "labor" in two senses; first, the man who does it; and second, the service he performs. The service a man performs is as much a commodity as anything a man can think of. It is one of the most valuable and varied kinds of commodity, but I would have, as an individual, full sympathy with the idea that when we are dealing with human relations we should deal with them on somewhat a different plane than if they were pig iron.

The CHAIRMAN. Of course, the purpose of this section of the Clayton Act, as I understand it from reading the proceedings of that time, was to prevent large aggregations of capital to use the antitrust laws for the purpose of preventing workers through the formation of unions to maintain higher scales of wages and better working conditions, and it was the judgment of Congress that the antitrust law should not be permitted to secure such an end.

Professor FETTER. Well, to the extent that the organization of labor enables labor to get more than what you would call a fair market value of its labor, it can and does become monopolistic.

The CHAIRMAN. There can be no question about that; it can. Any power is subject to abuse. You will pardon the interruption, Professor.

Professor FETTER. I am very glad to, indeed.

Now just a few words regarding the relation of competition to modern capitalism. This prolonged period of depression has caused the American people to do some fundamental thinking and to re-examine the grounds of our social institutions as they hadn't done when things seemed to be going better. There is a growing recognition of the relationship between economic and political freedom. A few

years ago this was a more novel thought; now it is quite bromidic, and I needn't elaborate upon it.

What is this thing called capitalism? To the Socialist, capitalism is simply an organized system of exploitation, and to some radical reformers it is a system of abuses synonymous in their minds with either big business or with monopolistic business. It is very largely in their minds the development of the last 75 years of corporation growth and is well represented by the caricatures of the capitalist as a very corpulent and very repellent sort of individual. But to most of us Americans it is an ideal never fully attained. It is a system of private property widely diffused, and free individual enterprise and initiative which grew up along with free political and social and religious institutions in the past thousand years in western Europe, and which is the greatest achievement of civilization. It cannot be separated, any more than a vital organ can from the living body, from the other forms of freedom and of civilization. The Socialists and some radical reformers would gladly see the whole thing swept away, and their number is to be reckoned with. A goodly part of the American people would like to see it freed of its abuses.

The CHAIRMAN. Do you mean by that that you think the number of those that would like to see the system swept away is increasing?

Professor FETTER. Yes, I do, Senator. I am sorry to feel that way, but if you take all these forms of opposition, which are, of course, inconsistent with each other, they agree only on one thing, opposition to what they call capitalism.

The CHAIRMAN. You find that increasing in the United States, according to your experience?

Professor FETTER. According to my observation as a citizen I believe it is. I think it has increased in the past 10 years.

Senator KING. Would you make a little qualification in your statement with respect to Russia? When I was there a number of years ago the ideology of the Russian Communist was, of course, the dictatorship of the proletariat, but now we find an infiltration of the spirit of capitalism even in Russia. Little by little there is a departure from that stern, relentless policy which was announced by Lenin and Trotzky during the revolution.

Mr. DAVIS. Senator King, do you not think that that relaxation is largely due to the fact that they have ascertained by actual experience that the original concept was simply not workable?

Senator KING. I think so. I think they are learning by experience the folly of communism, and the importance and necessity, if you have a civilized and progressive state, to found it on capitalism, in a proper interpretation of the word "capitalism."

Representative REECE. But, Senator, do you feel that the tendency in Russia is to shift toward a system of free competition, or rather to shift toward a totalitarian government in some form?

Senator KING. No; I think it is a little hard to differentiate, I think there is a movement toward private ownership of property. Of course, private ownership of property means relaxation from that stern philosophy to which I have referred, but still there is the totalitarian state.

The CHAIRMAN. Private ownership has not yet emerged in Russia. The only exchange, as far as I have been able to find out, has been this, that different gradations of ability of labor are being recognized

and there is now a scale of wages, skill, and ability are recognized by higher pay. There are at least three grades of compensation, but the worker who receives his wages or the salaried employee who receives a salary, is permitted only to use that salary for purposes of consumption and not for the purpose of establishing capitalistic ownership of property. That is my understanding of the situation.

Senator KING. There has been some recognition of a limited ownership in property. When I was there in 1924 there was no recognition of the right of an individual to own anything. The clothes he wore belonged to the state, he owned no home, he owned no personal property. There has been a little relaxation so people now claim this article or that article, or this product, as their own, and title to it vests in the individual, a very slow pushing back of the philosophy upon which the communistic system was founded.

The CHAIRMAN. I think as far as clothing is concerned, that is true, but my advice is that it hasn't reached real property.

Senator KING. Except they say you may rent property for a reasonable length of time to give you a little tenure. The ownership is still in the state, of the property, the mines, and the valuable things.

The CHAIRMAN. All lands.

Professor FETTER. We have pretty well outgrown the thought of the eighteenth century that human institutions are determined by natural law and the present political philosophy considers all human institutions as a matter of trial and error, of working out expediently the best forms, and always the fundamental condition that has to be met is human nature, and it is safe to say that 25 and 50 years from now the economic institutions of Russia will be very different from what they are, and if we follow the way of democracy in this country I am inclined to think that 25 or 50 years from now we might meet the Russian absolutism half way, both with much better forms of democratic society than either one has at the present time.

That characteristic belief of what we might call American political philosophy regarding capitalism is deeply rooted in the history of our race for a thousand years.

This story is much too long to recount here in detail. It begins with the chartering of the free towns in the eleventh century in western Europe, at the very climax of feudal institutions. Little democracies of free men and merchants in the midst of the world of feudal caste, serfdom, status, monopoly, and despotism developed. There was a steady and gradual growth of power and influence of towns. They got representation in Parliament, increasing in influence in the state, and they triumphed in the Puritan Revolution of the seventeenth century, and this was just the psychological moment, to use the modern phrase, when America was settled.

Senator KING. Professor, if you will excuse me, I have another committee and I regret very much not to be permitted to listen to your whole statement.

Professor FETTER. It was a psychological moment for the settlement of America because America, as has been remarked by European students, was settled by burghers and not by peasants. There was an essential difference between the burgher psychology of western Europe—that is, the town psychology, private property, and private enterprise, and the rural psychology, which is essentially the feudal and peasant psychology—and there was the most abrupt and complete

abandonment of feudal conditions in America as the result of this transfer to new conditions. Free enterprise, except for Negro slavery, with only moderate restrictions was the rule increasingly down to the Civil War. I think the 150 years since the adoption of the Constitution furnish a most remarkable example of cyclical change in this matter that can be found any time in history. The first 75 years up to the Civil War represented a steady increase of freedom, of enterprise, diffusion of private property.

TENDENCY TOWARD MONOPOLISTIC CONTROL OF INDUSTRY

Professor FETTER. Then suddenly at the close of the Civil War and in the 70's and 80's, the tide turned and the last 75 years have been an almost uninterrupted movement, with occasional efforts of reform, with Theodore Roosevelt's regime, and under "the new freedom" but on the whole a steady drift and tendency toward a greater monopolistic control of industry.

Now this period since 1865 is the one that we are, of course, most interested in just now. The Civil War was a turning point in our history. We had somehow begun to get accustomed to enormous corporations through the development of the railroads. Anglo-Saxon law had always been exceedingly suspicious of industrial corporations, had limited them in number, had limited them very strictly in their powers and functions. It always viewed them with suspicion, but soon following the Civil War the legislatures, both State and national, began to let down the bars to easy incorporation and free and easy capitalism. Railroad rebates and special privileges favored many large corporations, monopoly grew and thrived, as we know, through the 70's and 80's. In vain men looked for some sort of relief. Not until 1888, however, were holding companies organized by any general statutes, and that was unfortunately in my own present State of New Jersey. Industrial corporations had for centuries been limited to these specific purposes and stock of corporations could be held only by natural persons.

That change which occurred in my boyhood, which was all unremarked by most of our citizens, was not an evolution; it was a revolution; it was a tremendous revolution, with far-reaching consequences, occurring 50 years ago, during my own lifetime, and it is a good example of the misuse of the expression "evolution." This was a change made by human choice, by municipal statute. We changed the law. That is not evolution; that is a direct choice, social choice. It was not, however, a conscious social choice on the part of the majority of our people. It was introduced and put through without the great majority of people realizing what was being done, or if they did realize what was being done they had no conception of what it was going to lead to.

That must be always taken into account in the problem that this committee faces. It is not merely a matter of enforcing existing laws. It is a question of the whole economic set-up, so to speak, the whole conception of the corporation in the modern scene.

The enactment of the Sherman Act in 1890 was to reverse this movement but for 15 years it has a scarcely noticeable effect. There were two great periods of merger movement, one of 15 years from 1890, the very year of the Sherman Act, until 1904 when a decision of the

Supreme Court seems to have put a temporary stop to that movement, and again from 1919 to 1929, a still greater movement of mergers and combinations. The percentages of the national production under one ownership was falsely taken as the test during much of this period, and I trust that this committee will not be misled by any such a false yardstick.

The percentage of the national production is not a sound basis for the judgment of monopoly. Local concentration may give a very considerable local monopoly to a combination that has, say, not more than 10 percent of the national production. The enormous area of our country makes it possible for a local monopoly to extend over as great an area as the German Empire or the French Republic, and still have perhaps not more than 10 percent, or some meager percent of the total national production. It is a question of geographical limitation as well as of the total production. The misleading idea of monopoly as a single corporation versus the idea of monopolistic powers in various degrees, to which I have referred before, undoubtedly has greatly increased the difficulty we have had in dealing with this problem. The result has been a centralization of financial control and a unifying of price policies that pervades a very large part of the business field. That I can see no reason to doubt. I believe there is no division of sentiment on that point among economists. There is a very great division of sentiment, unfortunately, among professional or academic economists in regard to what is to be done about it, but the phrase "the decline of competition" is one, the full significance of which I believe is accepted by economists unanimously.

Now the burden imposed by this monopoly is a very unequal one. The central principle of capitalism is a business organization where there is universal fair and free competition. You see, each of those adjectives has a special meaning as I have tried to define it—fair competition and free competition. It is the right and duty of each industry which has the privilege of engaging in the making of profits to compete according to the rules of the game. Now private monopoly is special privilege, the privilege to violate the rules of the game of capitalistic business, and it is most successful when it is practiced by one or by a few in a business organization or society where other citizens continue to compete with each other. The advantages of monopoly decrease, even to the monopolist, as more and more other industries and occupations cease to compete actively and begin to practice monopoly. Monopoly is to a certain extent always scarcity, relative scarcity, and relative high prices. It is no more possible for all of the industries of the country to be monopolistic and profit by it than it is possible for both ends of the teeter-totter to stay up in the air. The privilege of monopoly and the gain of monopoly is necessarily the corresponding loss to the other members of society, and if we are pursuing a mirage greater than any other of the mirages that we are pursuing, the one which is greatest is the notion that we will bring peace and prosperity by universalizing monopoly, because as it persists in industry we are going to extend it and are extending it to agriculture, to labor, to one thing after another, with the conception that if one is admitted, everybody must be. That is the end of all fluidity and progress and enterprise.

The growth of monopoly in the last 75 years has progressively burdened the other less centralized and less organized elements of the

community. A notable example is building materials and building trades. It happens that the evil is double there, and is a burden on all other industries and workers. As a matter of fact, the very men who build houses and the very sellers of materials who sell at monopolistic prices the building materials, have to pay back part of it in higher costs for their own houses, and all other laborers and all other people engaged in industry are paying tribute to that particular industry.

Mr. DAVIS. Professor Fetter, in that connection, that is with relation to the effect upon other industries of conduct of a monopoly in industry, has it not been your observation that, generally speaking, monopoly sufficiently strong to carry into effect its purposes generally beats down the prices of all the products which the industry purchases for its purpose on the one hand, and increases the prices of products which it sells on the other? In other words, that it is a two-edged proposition. They make agreements, fix the prices at a low level if possible of the materials which they purchase at the same time that they are fixing the prices at which they sell their products?

Professor FETTER. Probably this double nature of monopoly has always been present more or less but it has developed more particularly in the last few years, I think since the turn of the century. A very strong selling monopoly in turn acquires certain buying monopolistic powers. Some of the younger economists experimenting in terminology call it "monopsonic." The Greeks never had a word for that.

But it is bound to be so. A big aggregation of capital buying materials from other industries begins to have a monopolistic power, and I think that is a considerable part, I am sure it is a very considerable part of the problems of trade associations—trade associations among comparatively smaller industries.

I had a contact a few years ago with the president of a small corporation—this is enough to make our grandfathers turn over in their graves: His corporation was worth only \$6,000,000. It was a small corporation, and I couldn't understand what his grievance against the Sherman Act was until I found that he was thinking of the whole monopoly problem as the buying monopoly power which billion-dollar or half-billion-dollar corporations had with reference to his corporation which supplied them with certain appliances.

The CHAIRMAN. It was probably true that this particular corporation found it much more difficult to borrow money for the essential needs of the corporation than any one of the billion-dollar competitors would have found.

Professor FETTER. Yes.

The CHAIRMAN. As a matter of fact, it is a common experience that the large aggregations of capital are able to secure money at a very much lower rate and for longer terms and on better conditions than the small business corporation may, and that in itself is an inherent difficulty which tends to magnify the big and reduce the little.¹

Professor FETTER. The aspect that he was thinking most about was the monopolistic power they had in buying from him and from his corporation. He felt in the grip of a few corporations and that, of course, is a large part of the problem that led to the Robinson-Patman Act and things of that sort. It is a comparatively new aspect of the subject, but for that reason is a very burning issue.

¹ See Hearings, Part IX, for testimony on this subject.

Of course, this applies particularly to agriculture, because, while this monopolistic power was increasing in the products that agriculture purchases, it continued and still continues to sell very largely on a competitive basis. Therefore there are certain conclusions which can be briefly stated regarding this sort of historical survey. Capitalism is becoming more unyielding and unworkable in geometric ratio as the field of competition is narrowed and as independent enterprises are merged into great monopolistic units, with resulting power of autocratic price fixing—limited, of course.

The Sherman Act, reasonably interpreted and enforced, would put an end to most of the evils of which the critics of that act complain. The Sherman Act and the Clayton Act were designed to prevent the business practices which weaken and destroy regulated and effective competition. Capitalism is working rather badly, pretty badly now, and its break-downs are becoming increasingly disastrous. Business leaders are vainly trying to operate a capitalistic system by methods and practices which are in conflict with its fundamental principles. The ultimate alternative to a regime of competitive prices is one of authoritarian prices. You can take your choice between private monopoly and public socialism.

There has been a good deal of discussion lately of the relation between monopoly and depressions, particularly the present depression. Recently there has been a renewed search for the causes of the periodic collapse of the capitalistic system and the ensuing periods of depression.

Mr. DAVIS. Just a moment, with respect to your observation that you have a choice between private monopoly and public socialism. Do we understand that what you meant was that absolute private monopoly would inevitably lead to public socialism, or just what do you mean by that? Do you mean that that is the only alternative we have, either private monopoly or public socialism?

Professor FETTER. What I meant was that if we go on down this same road we have been following for the last 75 years, it just has two forks. We either have to retrace our steps or find some bypass that will lead us in a different direction. That is the thought I have in mind. There is an alternative, of course.

Mr. DAVIS. But at the same time, as you have expressed yourself, do you believe that the full functions of democracy and capitalism may be restored by a restoration of free and fair competition and a proper government regulation to insure that? Is that correct?

Professor FETTER. It is conceivable, but I wish I had more faith in my prophetic vision, Judge. I am not sure whether we are going to succeed in saving it, and many people feel the same way. They feel that we are headed in the wrong direction, but they are not at all sure that we can save ourselves in time before we go over the precipice.

Representative REECE. You think we should have stopped somewhere down the road and looked at the signposts?

Professor FETTER. I think we should have read the signposts several times in the past 75 years.

The CHAIRMAN. Professor, I cannot allow that remark to pass without stating here my own profound faith that the people of America will find a way to stop before this movement has gone too far, and that we shall discover the way of making it possible to main-

tain opportunity for each new generation as it arises. That I conceive to be the real nubbin of the problem.

Competition, naturally, tends toward monopoly, because the most efficient will naturally tend to become the most successful and to expand the area in which he or it will dominate. But when a successful competitor reaches such a point that he is able to shut out competition, there, I conceive, is the point of danger.

I have been very much impressed in recent months with the fact that, wherever one goes, in whatever class of society one walks, whether one mixes with the so-called leaders of industry or with those who are cloistered in the schools, or with politicians or with workers, labor union men or with farmers, one finds an overwhelming desire in America to maintain democracy. I think it is exemplified on every hand, and that deep, abiding loyalty to the American ideals of government and of free opportunity is so great, in my judgment, that it will break down this tendency which you see. I am not at all as pessimistic as you are.

I really wanted that to go into the record.

Professor FETTER. Senator, you are the right man to be chairman of this committee.

The CHAIRMAN. I thank you for that.

Professor FETTER. It takes courage, and there isn't any doubt on my part that that is what the American people want, but whether they will recognize the proper means to attain it, that is where my doubt comes. There are so many things that look alluring, superficially plausible, and I am as confident as you are of the fundamental desires of the American people being to maintain our institutions and to improve them.

The CHAIRMAN. Perhaps one of our dangers arises from impatience. We want to settle this thing tomorrow, and it can't be settled tomorrow.

One of the reasons why I have been particularly interested in the work of this committee has been because I feel most deeply that it is very necessary in the interest of government and in the interest of business to survey this whole problem from their possible point of view, and I feel that when the facts are known that the American people and their good judgment will assert itself in a successful, but by no means a perfect, result.

Professor FETTER. It looks as if I might go away from this meeting more hopeful than I came.

RELATION BETWEEN MONOPOLY AND DEPRESSION

Professor FETTER. May I revert to this question of the relation between monopoly and depressions, which is closely related to the last topic we were discussing. I would read a few sentences, somewhat revised, from the remarks I recently made in another connection:

Two questions should be distinguished. What caused the collapse of 1929 or the recession of 1937, and how can such things be mitigated or ended? However rash it is to attempt to answer these questions, I venture the opinion that monopoly is not the sole or even the chief cause of financial depressions, although it has some part in causing them.

As applied to the last depression setting in in 1929, I think that monopoly had rather a particular and peculiar connection as compared with former depressions, and that is because of the great merger and combination movement which characterized the country from 1919 to 1929. That was a period of flotation of

enormous quantities of securities under the false hope that merger was the road to fortune. And in the sense of supplying tinder and fuel to the flames of speculation, I think the competition-merger movement of those 10 years contributed very largely to the excesses of our stock-market speculation and in other ways, but as a general explanation of depressions throughout the centuries, especially the last hundred years or so, it does not seem to me to merit a very large emphasis.

The chief evil of monopoly is the long-time, steady effect in limiting production and in increasing its prices. Monopoly distorts the normal equilibrium of the competitive price system, if you will pardon the word "normal." The chief evil of monopoly is lasting rather than catastrophic or temporary. A sudden shock to the whole price system, such as that of 1929 or 1937, is not a simple result of forces that have been steadily operating for over a half century during several business cycles. More probably the major fluctuations of the business cycle are mainly due to general monetary causes, including in that term the excesses of credit and of speculative investment.

So enormous has become the volume of outstanding dollar indebtedness which links together the banking system, public finance, and private business, the vast contractual fixed charges of corporation bonds and all forms of capitalized incomes, that the whole business system has become a house of cards. Even normal corporation financing has become highly speculative—the shift from preferred stocks to bonds and back again to common stocks. Monopoly's share of the guilt for aggravating and prolonging industrial depressions is probably greater than is that for their inception.

The best economic opinion of the world, I believe, is agreed at least on this one point, that once a national or world organization has got into a state of financial depression, the quickest way to get it out would be to give free play to the forces of demand and supply in the markets; artificially to stabilize prices in an industry with unused capital is further to destabilize production and employment in that industry. If all businesses, not only our own but that of countries with which we trade, were on a cash basis, if there were no outstanding debts, no rigid wages and prices, and no fixed contractual obligations in terms of dollars, there seems reason to think that such a thing as a financial depression would be both mild and brief if indeed possible at all. Disturbances of trade due to such political disasters as war or to great physical catastrophes might, of course, still occur. But all sorts of artificial price rigidities have multiplied in the last three-quarters of a century. Inflexible rates fixed by public-utility commissions, regardless of general price changes, are a large factor. The latest arrival, and in some ways the worst, is the stabilizing of certain prices and wages by private monopolistic action in disregard of other industries and occupations, and of the general welfare.

Monopolistic industry is for itself and the devil take the hindmost, and the hindmost are those without monopoly power.

There is a large subject here, and that could be discussed almost indefinitely. I will leave it with that.

The CHAIRMAN. Without objection, the committee will stand in recess until 2 o'clock.

(Whereupon, at 12:10 p. m., a recess was taken until 2 p. m. of the same day.)

AFTERNOON SESSION

The committee resumed at 2:20 p. m., on the expiration of the recess.

The CHAIRMAN. The committee will please come to order.

Professor Fetter, are you ready to proceed?

Professor FETTER. I am, thank you.

We were speaking of the relation between monopoly and depressions, which of course brings up the great and burning issue of mass unemployment and the relief problem. Everyone must feel modest in approaching this question. No one can be sure that he has the solution complete and entire, but the stubborn persistence of mass unemployment for the past 10 years, 6 to 12 million chronic unemployed, is something that is giving us all great cause for anxiety.

Now there is widespread acceptance of this fact as inevitable, and new theories have been invented to explain it as something inherent

in capitalism, or as the inevitable effect of a slower rate of population growth, so that we are doomed with a cessation of population growth to stagnation. Or again, as something which only a continual series of very revolutionary inventions, such as the automobile, which involves other great changes, like the building of highways, and so forth, could possibly prevent; otherwise chronic depression and chronic unemployment, according to these theories, is inevitable.

I may be pessimistic on some things, but it seems to me that that is the extreme of pessimism. I must dissent from all those explanations. I think it is perfectly possible for us, to have a prosperous state with a stationary population. If we do not have, the trouble lies in our institutions and not in some movement of democracy. The truth, it seems to me, is nearer expressed by a statement signed by 140 American economists in 1932, and there are several here present who signed that statement:

There is growing doubt whether the capitalistic system, whose basic assumption is free markets and a free price system, can continue to work with an ever-widening range of prices fixed or manipulated by monopolies.

That is, the capitalistic system postulates fluidity and adaptability and freedom and choice of goods and choice of occupations, freedom of markets and of prices, to bring about an equilibrium of labor, of occupations, and of resources with a tendency to full employment of all. Now this is the equilibrium which is questioned more or less in some quarters, but which essentially I believe to be sound. Anything which checks the free flow and tends to crystalize prices or choice of occupations and employments or artificially to fix these factors creates frictions which cause the whole mechanism of business to work badly.

A considerable degree of toleration of the system, of course, is possible. A certain degree of interference may continue. Like the human body, there is a considerable toleration to germs and diseases, and we may still go on living, but there are many evidences that we have already gone beyond the limit of toleration in this matter.

Finally, a system of bureaucratic control will become a necessity if we go on in this same direction—that is the condition attached to it—and the national planners will realize their ideal, if ideal it can be called.

The CHAIRMAN. In other words, you imply that it should not be called an ideal?

Professor FETTER. Well, I don't object to that inference.

The CHAIRMAN. Perhaps you share the view of the Chairman that it is too much to expect of human capacity to believe that any small group of persons has intelligence enough to plan the development of the human race.

Professor FETTER. Yes, Senator; but what I said must, of course, be taken in connection as a context with what I said about fair competition and about the necessity to regulate business from the outside, not from the inside, if we are to have competition. Competition is not a thing which automatically establishes itself in society and goes on without any effort on our part. It never has and never will. I spoke of the false notion that I thought had grown up of the connection between laissez faire and competition.

The CHAIRMAN. Yes; I think you developed that very clearly this morning.

Professor FETTER. That, of course, is all context to this statement.

The CHAIRMAN. In other words, your whole objective is that we should find a way to preserve a constant opportunity for new competitors to appear on the economic scene.

Professor FETTER. Yes; and that this regulation that I speak of should not be a regulation in the inside of business, in men's private affairs, or to substitute the judgment regarding the constant details of business, to substitute the judgment of bureaucratic authority; that this regulation should be a regulation of laws, so to speak, and not of men; that is, we should lay down general prescriptions and enforce them through the proper regulative agencies, but there is a great difference.

The CHAIRMAN. You are stating the position which, I may say, the Chairman has held for a long time.

Professor FETTER. Yes; that is a real school of thinking on the subject, and there is a very wide difference between it and bureaucracy.

The CHAIRMAN. It occurs to me that of appropriate interest at this point is this statement which was contained in an address of President Woodrow Wilson to a joint session of the two Houses of Congress on January 20, 1914.¹ This was the message in which he recommended the creation of an Interstate Trade Commission, as it was then called, and resulted in the creation of the Federal Trade Commission. He said:

The opinion of the country would instantly approve of such a commission—

Meaning an interstate trade commission.

I would not wish to see it empowered to make terms with monopoly or in any sort to assume control of business as if the Government made itself responsible.

I take it that more or less expresses the thought that you have in mind.

Professor FETTER. Indeed it does, Senator.

Mr. HINRICHS. May I ask a question at that point? Professor Fetter, as I understand it, your statement really visualizes two alternative forms of positive action. If intense restrictive measures are set up by private enterprise, you would visualize that as carrying with it a necessary development of public regulation that would lead to the type of national planning that you think is likely to be unsuccessful, as one alternative of development?

Professor FETTER. Yes.

Mr. HINRICHS. And the alternative is an equally positive program of regulation under which you create the institutions of true competitive enterprise; that is, you don't visualize standing in a situation where you have a mere absence of Government activity, allowing a field for private enterprise to establish restrictive practices, do you?

Professor FETTER. As I get your statement, I quite agree with it; yes.

Well, the alternative to drifting or moving down in that direction is either to create opportunities for general employment in private industry or to accept the system of State socialism or system of national planning in that direction, but we have the other alternative of moving either back toward or forward toward a system of freer industry. In that connection I found out during the recess that there were several who raised a question as to the interpretation of my answer to Senator

¹ Introduced as "Exhibit No. 309", *infra*, p. 1792; appendix, p. 2174.

King this morning. The Senator was speaking of his impression that the Russian system was gradually moving toward some of the real essentials of capitalism, and I expressed a hope that that would be so and a belief that it probably would have to be so. The fundamental conditions of human nature are such that they could not long continue to operate that dictatorial totalitarian system as it was without distinctions as to wages and rewards, and if the world is to be safe for democracy it should be the wish of every American that the Russians may speed in that direction; we should hold forth good thoughts toward them. One hundred and sixty million people represent a tremendous factor in the world today, and we should hope that they would move in that direction, which means a movement toward the essentials of capitalism in its better sense, let us hope. On the other hand, we have to reform many of the abuses of capitalism, and if we set our hand to it and eliminate the excesses and excrescences that have grown up, we shall have, I trust, in the course of a generation or so, a better type of capitalism than we have now. There is where I am sharing with the Senator his views.

The CHAIRMAN. In other words, you sense the desirability at least of developing a democratic system of capitalism with as many as possible of the abuses removed.

Professor FETTER. That is indeed the idea.

Finally, I will just say a word regarding certain aspects of the monopoly problem that often are lost sight of. If you will permit me a final moment of sentimentalism, we have learned of recent years that ideologies are, after all, the most practical things in the world; they can accomplish the greatest changes and results for good or for evil.

The restoration of free enterprise and free competition is necessary to create conditions of happy living. We are likely to take, in the whole discussion—I am sure, we all are—of business organization, a too materialistic view, as if the question whether this method or that form of business organization were better than the other was to be decided solely on the grounds of physical measurements; if a certain organization or business would produce more tons of pig iron we say it is better; more yards of cloth, it is better. I urge upon you, at the danger of being considered sentimental in this matter, that happiness does not consist of the things that we buy with our work as much as it consists of the feeling we have while we are at work. It is the whole 24 hours a day that have to be considered, and it is the task of statesmen not to consider the economic welfare in terms of tons and yards and bushels, but in terms of human happiness.

It is the issue of price economics sole and simple, versus the issue or the policy of welfare economics. The view that we must take, then, is a much broader one than the narrow commercial conception of welfare and prosperity.

Farming was so long the dominant occupation in America that it became the American tradition to look upon the settlement of land on the geographical margin, the frontier, as the one characteristic opportunity for independence open to young men. But even in the first half century of our existence as a nation the opportunities in business, in industry, in shops, in commerce, were even greater than the opportunities merely in the settlement of land. Farming is very frequently contrasted with other ways of making a living in this respect. It is said that while other ways of making a living are apart from life, farming is a mode of life.

This contrast is too extreme. Every method of making a living is also a mode of life, and I venture the opinion that a large part of our problem today is the problem of creating the right attitude of mind while men are at work, and the opportunity for independence is so valued by men, so fundamental, that they will make many sacrifices for it. It is partly responsible for the problem of the agricultural classes. They would rather have a much lower monetary income to have their independence on the farm, and they bid down their returns and there is an excess of agricultural population because of that.

Now the disappearance of the frontier generally dated about 1890, with the exhaustion of free arable lands open to settlement, and it is rightly declared by students of American social and economic institutions to be a fact of tremendous importance. It signified the closing of one kind of opportunity open to the common man in America from the earliest colonial days, affording a field for individual initiative and enterprise, and an alternative of escape from economic subordination in the wage relationship.

Three centuries of such conditions exercised a powerful influence in the shaping of those qualities of American national character which we deem most precious and whose disappearance we would most deplore—indeed we are already deploring. But it may be questioned whether we have not too much emphasized the effects of these frontier conditions and economic changes to the neglect of other accompanying factors in our national life. The closing of the frontier was primarily a mere geographical event which can dominate our national destiny only if we allow it to do so. To be sure, it narrowed for individual enterprise the sort of opportunity which depended on the physical fact of a sparse population and unsettled land, but the greater frontiers of opportunity to young men, even during that period, up to 1900 or 1890, consisted in the multiplicity of small decentralized enterprises.

We have watched this frontier being closed by subversive changes in our business law, permitting and compelling an excessive centralization of industrial control and the useless destruction of hundreds of thousands of independent enterprises. Opportunity for the common man in a free democracy depends more on right economic legislation and its faithful administration than it does on the presence of an institutional frontier of cheap land. We are not forced to bow in a spirit of fatalism to a mere physical fact. The hope of democracy lies in physical changes, in the enlargement of opportunity for the common man, and that means the decentralization of industrial control and the wide diffusion of private property.

We have been witnessing the latest attempt of monopoly under the deceptive slogan of fair competition to restrict economic freedom and to further narrow the remaining frontier of industrial opportunity to young manhood. The Nation may open that frontier again and enlarge it and keep it open if only it is willing to pay the price.

That is my conclusion.

The CHAIRMAN. Have you concluded your statement, Professor Fetter?

Professor FETTER. I have, thank you.

The CHAIRMAN. Do any members of the committee desire to address any questions to the witness?

Mr. DODGAS. I have a question, Mr. Chairman, that I would like to ask. This morning, Professor Fetter, you referred I believe to the

New Jersey law passed in 1888 which permitted one corporation to acquire and hold stock in another corporation,¹ and I believe that you used a word in characterizing that act as something unfortunate, or at least I got the implication that you felt that that was the beginning of a trend which facilitated the trend toward monopoly and against free enterprise.

Professor FETTER. I doubtless did use that term.

SIMPLIFICATION OF CORPORATION SET-UP PROPOSED

Mr. DOUGLAS. Did you wish to leave the thought with the committee that you would be in favor of abolishing holding companies?

Professor FETTER. If it is of importance, that is my personal opinion.

Mr. DOUGLAS. That they should be abolished?

Professor FETTER. Yes; I think we need to return to a simplification of the corporation set-up, in a variety of ways. A corporation is a two-edged sword. It should be kept for its good uses. It is like a sharp tool.

The CHAIRMAN. Don't you think that there is a possibility that the development of the corporation has gone to such an extent that discretion should be used in any attempt to break down the entire concept of holding companies? Perhaps it would be perfectly proper and would have no bad effect upon our economy if subsidiaries which are necessary for the conduct of the primary business of the parent corporation might be permitted to exist. You are aware, of course, that some States permit corporations to hold stock of other corporations when they are necessarily adjuncts of the parent corporation, but do not allow them to hold stock in corporations which have no relation with the primary business of the parent corporation.

Professor FETTER. I judge that you refer there to what we would call vertical integration rather than horizontal.

The CHAIRMAN. No; I am thinking of the acquisition by corporation A of stock in corporation C which is engaged in an utterly different business, which has no relation whatsoever to the business of corporation A. Perhaps the stock might be acquired in the first place merely as an investment and then later on would go over to control and management, so that by the building up of the holding company device the centralized control over the entire field of our economy could be built up.

Professor FETTER. If a corporation needs a certain type of activity to accomplish the purposes of its organizations, then it can organize that within its corporate charter, and I have yet to see any cases where the formation of a separate subsidiary corporation would accomplish a good that could not be accomplished in other ways.

The CHAIRMAN. Sometimes, of course, corporations find it necessary to create subsidiaries in order to comply with individual State laws, or with the laws of foreign governments. For example, a corporation like the General Motors Corporation is engaged in business in every civilized country on the face of the globe, and it creates a subsidiary corporation in those various countries for the purpose of enabling it to comply with the specific laws. Of course, that is all part of an international economic development.

¹ Supra, p. 1667.

Professor FETTER. There of course you have mentioned the organization of corporations under the laws of a country not our own.

The CHAIRMAN. No; I mentioned first the creation of subsidiary corporations to comply with the laws of the respective States of the Union.

Mr. DOUGLAS. I take it that part of your thought, Professor Fetter, was in outlawing of holding companies you would place a check or a restraint on the growth of bigness itself, by reason of taking that step?

Professor FETTER. Well, Mr. Douglas, I think one of the most essential distinctions to be made to clear up a very large amount of confusion on this subject is the confusion between physical or technical bigness and financial bigness. Most of the discussion of the subject is tangled up in that terminology. We talk about a big business when we mean a big factory and then we talk about a big business when we mean a combination of a hundred identical factories distributed geographically all over the country.

Mr. DOUGLAS. Well, you were talking about bigness in a financial sense?

Professor FETTER. That is what my talk was directed toward.

ADEQUACY OF ANTI-TRUST LAWS AS LEGAL IMPLEMENTS

Mr. DOUGLAS. That is what I thought. That was one question I had, Mr. Chairman. The second is this. This morning you stated, I believe, that it was your opinion that the Sherman law and the Clayton Act, if reasonably interpreted or reasonably enforced, or I forget—

Professor FETTER (interposing). I think I said both probably—reasonably interpreted and enforced.

Mr. DOUGLAS. Would be adequate to do the job so far as legal implements were concerned. You left the impression in my mind that they had not been reasonably interpreted by the courts.

Professor FETTER. I think they have not. My own study of the subject left me with astonishment at some of the turns that adjudications have taken in the last 50 years but, of course, there is a chance of difference of opinion there.

Mr. DOUGLAS. Would it be asking too much, Mr. Chairman, to ask Professor Fetter to submit for the record a synopsis of an economist's view of the legal decisions on this matter?

The CHAIRMAN. Well, of course, if Professor Fetter wants to undertake that analysis.

Mr. DOUGLAS. I don't mean necessarily an exhaustive one, but one that will illustrate the point of view you have expressed in general.

Professor FETTER. Well, if you will pardon me for speaking of it, my studies are pretty thoroughly recorded in the book that was mentioned before, *The Masquerade of Monopoly*. It represents an economist's and layman's view of this field of law and the decisions of the Supreme Court. I have made a prolonged and intensive study of the Supreme Court's records in those matters, devoting weeks and months to the study of certain cases which an over-burdened court had had to settle in the course of a few days. Especially on the economic side I think they were very often misled and confused. You will find in there my verdict toward the court is extremely charitable and

extremely sympathetic, but I do feel that the chief responsibility lies in the executive department; I mean, responsibility for the comparative failure, but please do not understand me to say that the antitrust laws have been complete failures; I think that we owe a great deal to them. It is just that in a relative sense they have not accomplished anything like what was hoped for them or like what might be accomplished with perhaps some further clarification and amendment.

The CHAIRMAN. In connection with your statement that you believe that some responsibility must be charged to the executive for failure properly to enforce the Sherman antitrust law, it might be appropriate to call attention to the fact that William Howard Taft, in a message to Congress while he was President and later on while he was a member of the faculty of the Law School of Yale University, which Chairman Douglas also graced at one time, declared that faulty pleadings by the Department of Justice in the famous *Knight case* was in his opinion responsible for that first fatal decision which ended the first effort of the Government to enforce the Sherman antitrust law against the so-called Sugar Trust.

Professor FETTER. I believe that was a quite commonly held opinion among lawyers at the time, and there are other cases since in which I think an equally strong statement might be made.

The CHAIRMAN. Are there any other questions to be addressed to the witness?

Mr. O'CONNELL. I should like to ask a question. Dr. Fetter, this morning while you were discussing what you termed the "rules of the game" you drew an analogy of a case, supposing two runners running a foot race, and suggested that a feeling of sportsmanship would be in some degree responsible for the fact that one runner would not take an unfair advantage of the other, say, to put him out of the race.¹ Returning to the field of industry, what would you say as to the relative efficacy of sportsmanship or something comparable to that in the industrial field, and the presence of a referee to police or to see that the conduct of the participants in the contest was in accordance with the rules. Do you see what I am getting at?

Professor FETTER. Well, that there is an analogy I do not doubt, but I would not put too much stress upon trusting to the spirit of sportsmanship. We still have the umpires, the referees, and we have the rules, and if a man jabs the other with his elbow as he goes around the turn, he is disqualified. That is a rule that is laid down by those who are conducting the sports.

Mr. O'CONNELL. What I am getting at is, in the field of industry you wouldn't put too much reliance on the feeling of sportsmanship or its counterpart; you would probably put more reliance on the referee to enforce the rules. Is that correct?

Professor FETTER. I have very little sympathy with the plea that is going around by professional advocates for self-government in industry. It is true we must try to frame our laws in such a way that the honest and social-minded members of industry will cooperate the fullest, as we do, in the enforcement of other laws.

The law-abiding citizen cooperates in the enforcement of the laws, so that there is a great need for treating honest business not as a criminal in advance but in soliciting its cooperation. But the idea that self-government in industry should apply to price policies and to

¹ See *supra*, p. 1662.

determining the public policy of the industry is to make men the judges of their own cause. Adam Smith sufficiently replied to that 150 years ago when he said, "Men in the same trade seldom meet together but the conversation ends in a conspiracy against the public or in some contrivance to raise prices"—and that was the verdict pronounced 150 years ago, the wisdom of which never has been questioned since, on the proposal for self-government of industry.

The CHAIRMAN. Are there any other questions?

Professor Fetter, we are very much indebted to you for a very lucid statement and we thank you indeed for your presentation.

Professor FETTER. Thank you, Senator, because I feel you have been exceedingly patient in this academic development.

The CHAIRMAN. It interests our patience to listen to you, Professor Fetter.

Mr. BALLINGER. May I present the next witness? State your name and occupation for the record.

TESTIMONY OF JOHN T. FLYNN, ECONOMIST, NEW YORK CITY

Mr. FLYNN. John T. Flynn, New York City, economist.

Mr. BALLINGER. Senator O'Mahoney, Mr. Flynn is very well known; he has written extensively for a number of years on economic problems, in the press and numerous magazines, and he has also written a good many books, and I feel sure it is superfluous to tell the committee about Mr. Flynn, as most of them have heard about him.

The CHAIRMAN. There is a possibility that the publications of this committee may reach some persons who haven't read Mr. Flynn's books or persons who have not read his newspaper articles which appear daily. I think perhaps it might be well just to make a more complete statement.

Mr. BALLINGER. All right, Mr. Flynn; will you tell us some of the books you have written?

Mr. FLYNN. Mr. Chairman, I have devoted myself many years to observing and writing about economic phenomena for various American journals and newspapers and writing books on those subjects, the latest of which is one I think has been used here, *Security Speculation, Its Economic Effects*. I have acted here as an economic adviser for the Senate Banking and Currency Committee in the investigation and study of the New York Stock Exchange and writing a report on that subject, as well as for the Munitions Committee in the study of war profits and war taxes. I am employed by one magazine to write for them on the passing economic phenomena; that is *Collier's Magazine*. I contribute to most of the others.

If there is any further statement I will be glad to make it.

The CHAIRMAN. I think that is quite sufficient.

May I ask, how long have you been engaged in this work?

Mr. FLYNN. About 25 years.

Mr. Chairman, I assume that what you gentlemen are talking about is the present economic system.

The CHAIRMAN. We are not talking, Mr. Flynn; we are listening.

Mr. FLYNN. I should think you have been listening. I observed today that this has been a magnificent job of listening, and what you have been listening to. But what you have been wanting to hear, I assume, is what can be done within the framework of the existing

economic system. Nobody is seriously contemplating substituting another economic system for this one, at the present moment in the United States at least. No large number of people want to do that, and it could not be accomplished without great agitation over a long period and probably violence in the end.

The CHAIRMAN. Let me say that I have not, nor has any member of this committee, suggested any change in the economic system.

NEED FOR IMPROVEMENT IN FUNCTION OF ECONOMIC SYSTEM

Mr. FLYNN. I say this for another reason, because one hears continually the statement that we are in a new era, we are in a new age, and in a sense, so far as the accidents are concerned, that is true; but essentially we are in the economic capitalist money economy, which operates according to the same laws now as it did in years gone by, although they may not have been so well understood in years gone by. New technological and organization factors have entered, so that these laws find themselves impinging on new conditions, but it is not about a new era with a new economic system that I understand we are concerned, but how the present economic system can be made to function, not perfectly but at least better than it has been functioning in the past.

The CHAIRMAN. For the benefit of the rank and file.

Mr. FLYNN. For the benefit of the mass of the people; and I think we ought to be under no illusions as to how it has functioned, because if you go back over the last 25 years you will find that at least 15 of them have been years below the normal of economic activity, which is not a very good showing.

Now I should like to state at the outset that the thesis I should like to present to the council is this: First, the investment goods industries are essential to a continuous functioning of the capitalist system; second, that the investment goods industries are now very close to a state of complete collapse; third, that one of the major reasons for this collapse is the constrictions of monopoly and monopolistic practices; fourth, that the breaking of these monopoly practices is not only essential to recovery but essential to the functioning of the capitalist money economy.

The CHAIRMAN. And the maintenance of a democracy?

Mr. FLYNN. I mean to touch on that, and if I overlook it I hope somebody will ask me about it.

The CHAIRMAN. Would you accept that amendment?

Mr. FLYNN. I would indeed.

Just to clear up a few things in the matter of terms. I have used the term "investment goods industries." In popular discussions one hears references to durable goods and heavy goods, and in a general sort of way everybody has an understanding that what is the matter with us is that these heavy goods industries, these durable goods industries, are more or less supine at the present time, and that all of the people who are ordinarily employed in those industries are out of work, and that therefore these industries must be revived in some way.

But the importance of these industries does not arise from the fact that they are durable goods industries or heavy goods industries, but from the fact that most of them are investment goods industries.

They are industries, the products of which are bought, not with what might be called the expendable income of people, but with their capital income, with their savings.

They are the things which people buy with their savings rather than with the money which is usually regarded as their expendable income.

MECHANISM OF THE CAPITALIST ECONOMY

MR. FLYNN. Now, I want to point out some facts about the mechanism of the system, and I hope that you will pardon me for doing this and supposing that you gentlemen are not familiar with these elementary economic factors, but I have come to learn over many years of experience and discussion that confusion comes not merely from a confusion about terms, but also from men not having in the front of their minds certain elementary principles which perhaps they have in the back of their minds and which are lost in the discussion, and my object is to focus attention upon the key part which these investment industries play in the functioning of the system.

Now we know how goods are produced, all sorts of goods. We know how hats are made, how shoes are made. You could find in the United States thousands of men who, if all the shoe and hat factories in America were to be abolished, could promptly reproduce them all and go to producing hats and shoes. And they don't do that now because when you produce hats and shoes, you must at the same time and some place or other produce the money income with which hats and shoes are purchased. Whenever you make a hat to sell for \$5, some place \$5 worth of money or income purchasing power must be produced to enable somebody to buy that \$5 hat, and the trouble now arises out of the fact that while we know how to produce the goods, we apparently do not know how to produce the necessary purchasing power. We know how to produce the natural income, but we do not know how to produce or get started the necessary money income.

It is for the purpose of clarifying that idea that I wish to refer to two very simple charts. I have used them not because it is not possible to state this in terms of ordinary English, but because this enables me to say in one-fourth the time what I want to say if I did not use the charts. I would like to introduce for the record chart No. 1, entitled, "Production of money income."

THE CHAIRMAN. The charts will all be received in their regular order as you present them.

(The chart referred to was marked "Exhibit No. 294" and is included in the appendix on p. 2165.)

MR. FLYNN. Here is an enterpriser, a manufacturer of consumptive goods. He does two things, this man who is called A. He produces goods, shoes, shirts, clothes, or whatever it may be, and he sends them to the market to be sold, but at the same time there in that same factory where he is producing those goods he is producing the money income which is essential to buy those goods. In other words, he is expending costs of production, wages, rents, interest, all sorts of expenditures which can be lumped together and called the cost of producing these goods. And all of these sums are paid out to the people who participate in one way or another in the process of producing these goods, so that from that enterprise as planned you have

going out continuously while he is in activity two streams, one a stream of goods which goes into the market place to be sold, and the other a stream of money income which is going into the pockets of the people. Let us put it that way for simplicity. Or we might call that a reservoir of purchasing power. But let us say it is going into the pockets of the people who have produced these goods.

At the same time here is another enterpriser, B, who is doing the same thing. He is producing some other sort of goods. He is sending his goods to the market place to be sold, and he is paying out into the pockets of the people the costs of producing those goods which we will call income. So that when the process is finished, if you could break it off at any given point, you have a supply of goods in the market place and a supply of money income in the pockets of individuals which they can use to buy the things in the market place.

I am presenting this in the case of two, but I will extend it in a minute—just two enterprisers.

Now what happens after this much has gone forward? A, as we say, wants to sell his goods. He wants to sell those goods for the amount he paid to produce them. That is to say, he wants to go over here to the pockets of these people and take back from them everything that he expended to produce the goods, plus a profit. He wants to take back all he paid out plus an additional sum which we call profit.

And B wishes to do the same thing. He wishes to go to the pockets of the people and draw therefrom in prices all that he paid out in costs of production, plus a profit, and it would be the same if instead of having A and B, you had 100,000 enterprisers all operating at the same time, all sending out into the market place a great stream of goods and into the hands of the people a great stream of income. Every one of these enterprisers would want to go back to that reservoir of income to which he had contributed a given sum and take that amount back as the price of the goods—take that amount back plus a profit which would be the price of the goods, and that is perfectly natural. This is a profit system. The men could not operate unless they could do that. But obviously they cannot if the set-up is as I have described it here and nothing else is added. They all cannot go to this reservoir and take back what they paid into it plus an additional sum which is called profit, and it cannot be done unless we can introduce another factor which will supply that additional sum which will enable them to take back that profit.

The CHAIRMAN. In other words, the figure on the chart which is labeled "Market for goods" and the figure on the chart which is labeled "Money income", so far as this chart is concerned, represent only what has been put into it by Enterpriser A and B, so that there is nothing from which the profit may be drawn.

Mr. FLYNN. That is correct.

Now we complicate it a little bit, and I now offer chart 2, called "Production of income, consumptive and investment industries."

(The chart was marked "Exhibit No. 295", and is included in the appendix on p. 2165.)

Mr. FLYNN. Here you have another gentleman who is called C, and he is doing precisely what A and B are doing. He is producing goods, and he is producing money income because he is employing people and paying out sums of money for materials and paying out interest and all sorts of charges as the cost of producing his goods.

He is sending here into this money income market a large amount of income, so that while he is operating you have over here in the hands of the people the income which has been produced by A, by B, and by C. But let us imagine, if we can, the apparently absurd notion that C sends no goods into the market place, that is to say that he throws them all into the Atlantic Ocean. We do have cases like that; they don't throw them into the Atlantic Ocean, but we do have gentlemen who manufacture goods which they never sell because nobody would want to buy them. But he sends no goods to the market and as long as he will do that, as long as he will produce money income and put it here in the hands of the people, along with A and B, without asking any part of it back, why then A and B can sell their goods for the income produced by A, B, and C, and that is what makes profit possible for A and B.

Now who is this person C? And I beg you to understand that I am giving you a very highly oversimplified explanation of a very complicated subject which could be complicated until the charts would flow in a steady stream, too. He is a man who is willing to manufacture goods and sell them on long-term credit; he is willing to make a locomotive, let us say, and sell it for a note payable in 20 years; he doesn't want any of this income back. I am taking the extreme case now.

The CHAIRMAN. You mean he doesn't want it back immediately.

Mr. FLYNN. He doesn't want it back immediately. He wants it in 20 years, let us say.

Senator KING. He wants a negotiable note.

Mr. FLYNN. I will come to that, sir. He wants a negotiable note, but at the moment he doesn't want any of this income back; he doesn't take it out of that; he doesn't negotiate that note with this money income, as I will try to show you. He is the man, by the way, who builds houses and sells them for one-fourth down and three-fourths in 3 years or 5 years or 10 years, or builds locomotives and sells them on 20 years' time, or builds heavy machinery and builds any of these large-scale heavy goods which I call investment goods. As long as he does that A and B can operate at a profit and the moment he stops A and B can no longer operate at a profit, and the moment that A and B can no longer operate at a profit they stop operating.

The point I am trying to bring home to you is that the condition of profit in the profit system is the continuous functioning of a man who is willing to pay out funds as cost of production but is willing to sell his goods on long-term credit.

As Senator King has said, usually the man who makes locomotives does not want to sell them for notes which he cannot collect for 20 years. He wants to sell them for negotiable notes or for cash which comes from somebody who has loaned that cash on bonds, let us say, to a railroad, but those bonds and that cash usually come out of a pool of money which I have not yet referred to.

Now let me put it this way. A and B, A and B together—we will leave C out for the moment—put over here \$3,000 apiece, which is \$6,000.

The CHAIRMAN. You say "over here."

Mr. FLYNN. The money income. The money-income reservoir is \$6,000. They want to take back \$6,000, let us say, plus 10 percent,

which would be \$6,600. But the people who have received this money income do not want to spend \$6,600; they haven't got \$6,600; they have only got \$6,000, because we have left C out for the moment, and they do not want to spend the \$6,000 which they have received because they wish to save some of it. They wish to put, let us say, \$600 aside, so that you have a situation where A and B wish to get back \$6,600 from people who have \$6,000 but only want to spend \$5,400.

This savings money, instead of flowing over here to the market place to buy things, flows over to what might be called a savings pool or a savings reservoir, and that tends to accumulate over the years, and it is out of that that C gets his money. In other words, when a railroad wishes to buy a locomotive from C, C wants cash, but the railroad borrows it over here out of this savings pool; it does not take it out of this stream of current money income.

Now let me add one point to that. This, it seems to me, is crucial. As money is paid out in wages it tends to move on from the man who receives it to the merchant who has goods to sell, from the merchant to the producer, and to the merchant's wage earners, to the producer's wage earners, to the maker of raw materials; it circulates around, passing from hand to hand and creating business and activity as it goes. It might be called money income, which is moving funds. But at intervals in this stream certain people decide that they are not going to pass it on, they are going to save it; in other words, if you could imagine this stream of income flowing around in a pipe like water, but at certain points coming to little vents through which it drips into a pool, it ceases to go around in the pipe and comes into a static pool of savings until it is drawn back by some mechanism into that stream of income again.

In other words, the man who puts aside a dollar out of his current income and earmarks it as savings—I do not mean the money which he is saving up to spend in the summer for a holiday or which he has put into a Christmas account to be drawn out and spent at Christmas, I mean the money that is earmarked as true savings which he intends to keep as long as he can—never spends that money himself, and it will never get spent and never get back into the stream of saving until——

The CHAIRMAN (interposing). Never get back into the stream of expenditure.

Mr. FLYNN. The stream of expenditure, until he or some agent to which he has committed it invests it or lends it to somebody, and when that agent or he invests it, then he puts it out in machinery, in lumber, in cement, in steel, to put up a plant, to fill the plant with machinery, or he lends it to somebody who is going to do that. In other words, these savings tend, not 100 percent, but generally and almost 100 percent, let us say a very large percentage, to be expended only for investment goods, so that the only way in which these savings can be drawn back into the stream of spending is to have somebody invest them in some kind of an industry, either by lending or investing directly, and when he does that the man who is putting up the house or who is manufacturing the locomotive, having borrowed it pays it out in wages to build the locomotive, and it is back again in this money-income reservoir and moving across to the market place and buying goods of A and B.

If I have been successful in putting over the idea I have in mind, I have shown that this is the sensitive part in the functioning of the capitalist money economy, and this is the mechanism over here which draws funds back from the savings pool and puts them into operation again. There is another element which I don't want to go into because I don't want to complicate this too much. This mechanism tends to draw into the stream of spending, funds which didn't exist before, through bank loans. I am sure you gentlemen understand that mechanism and I won't go into it, so that when this breaks down it is much more serious than when an industry here breaks down.

Senator KING. When C breaks down?

Mr. FLYNN. When C breaks down it is much more serious than when one of the B units breaks down, because this is the very bottleneck, or point at which power is forced into the system to make it operate.

Now, what are these investment goods industries? I do not speak now of investments, but of investment goods industries. A man may invest in all sorts of industries.

The CHAIRMAN. Do you wish us to understand that it is your thesis that the only source of money from which the profit may be obtained, comes from the enterpriser who is willing to sell the goods for which he pays immediately the cost of production, either by way of purchase of materials or wages—is willing to sell those goods only upon long terms?

Mr. FLYNN. Either sell them on long terms or sell them to a purchaser who borrows the money on long term.

The CHAIRMAN. You say that is the only source?

Mr. FLYNN. I do not say that is the only source. There is another source of profit. I do not like to introduce this. Let us suppose now that B is operating at a loss. B puts in \$3,000 over here, and A puts \$3,000 over here in this money income reservoir, but B doesn't manufacture a very alluring type of goods. So when these people go to spend their money they buy A's goods and not B's goods, so A gets back, instead of his \$3,000, \$3,500, which is a good profit, a profit of \$500, and B gets back \$2,500 and has a loss, and the loss that B has sustained enables A to have a profit. Now, I am not advocating that kind of a thing. I am pointing out another source of profit, not to the system but to A.

The CHAIRMAN. So far as the system is concerned, Mr. Flynn, does it make any real difference whether the payment for the goods is made immediately or over a period of 10 or 15 or 20 years? In the terms of the entire system, what difference does it make whether I am paid today or a week hence, a month hence, or 6 months hence?

Mr. FLYNN. It makes this difference, that you have to have somebody in the system who is willing to manufacture these goods and defer payment on them, so that the income which he has produced in the production of those goods is available to be distributed among the other enterprisers who demand cash.

The CHAIRMAN. You tell us that the source of profit is (a) deferred payment for goods immediately produced; and (b) the loss which an enterpriser sustains in the production of goods which he sells for too low money.

Mr. FLYNN. I am not sure how large a part loss plays in this profit.

The CHAIRMAN. Is there no other source of money?

Mr. FLYNN. Oh, yes; there are favorable balances from exports, favorable export balances. I should think that these are the three great sources of excess funds which enable those enterprisers who demand cash to operate at a profit.

The CHAIRMAN. Does increased production play any part in creating a source of profit?

Mr. FLYNN. Well, Senator, production is the only source of income, whether it is little production or great production, so increased production produces more income, but it also produces more goods, and if you didn't have this man in C in here, but only had A and B producing, then no matter whether they produced a little bit or a great deal they would only produce income sufficient to balance their costs, and couldn't get a profit out of it. In other words, whether the production be great or small, you must have somebody who is producing the excess income in order to enable these two gentlemen, A and B, to get a profit.

Now, I did not mean to give you the understanding that I believe that the profit comes out of the credit. The profit comes out of the expenditure of the cash now; the profit for A and B comes out of the expenditure of the cash by C now, and his willingness to operate without taking any part of it or all of it back now. This means credit.

The CHAIRMAN. Doesn't the estimate of value which the purchaser places upon goods play a very important part (on goods and services) in the creation of the reservoir from which the profits are derived?

Mr. FLYNN. No I do not think so, Senator.

The CHAIRMAN. Let me state what I mean. If enterpriser C is able to secure labor at a low cost, or material at a low cost, in each instance much lower than that at which enterpriser B secures it, is there not then created an excess which goes into profit, or would you say that that is merely the loss of the worker or the person who sold the goods?

Mr. FLYNN. I should say, of course, that when enterpriser C, who is this investment goods enterpriser, can obtain all the factors of production, which would include labor and materials, at a lower price, or at a reasonably low price compared with other markets, he would be disposed to produce more, and that as the cost of the factors of production go up for C, he is disposed to produce less, and that is one point I am coming to later, and therefore the extent to which C may be producing, to which C may be in the market, will depend undoubtedly upon the relative cost of the things which he has to produce, as compared with these other industries, but I do not think that that enters into this particular equation.

The only point I am trying to make clear here is that unless he is operating and unless he is pouring money income down here which A and B can share between them, and unless he is operating on credit or the equivalent of credit—that is, selling to people who get the purchasing power through credit—then A and B cannot possibly have a profit, and if they cannot have a profit, they will not operate, and they cannot have a profit out of the income which they themselves produce in the production of their goods. That is the point I am trying to make clear.

Now I said before, this is a very highly oversimplified statement of this theory because there are many other factors which enter into it, but I believe it to be a fair statement and if you understand it as a

mere general outline it is sound, and from this we may conclude that the indispensable condition for the functioning of the capitalist system is the functioning of the enterpriser C, the man who makes the investment goods, and that when he stops functioning for any reason—either because he does not want to produce or is on a strike or because nobody will buy his goods because nobody wishes to invest, that when that takes place and he goes out of business, then these people stop, but they stop because they can no longer sell at a profit.

Now, if there are any further questions to be asked about this I should like to answer them here.

MONEY ON DEPOSIT NOT INVESTED

Mr. FLYNN. Very well, now then my next point is that this gentleman C is now pretty much in collapse. Oh, he is operating, but he is operating at a very, very low level of activity, and this is so because investment has collapsed. Private investment in the United States for whatever reason is practically at a standstill. Now I want to offer just a few figures to illustrate that point, and I offer chart 3 entitled "Total Deposits (Demand and Time) of All Banks," and I think this chart illustrates a fact which is not very generally known.

(Chart 3 referred to was marked "Exhibit No. 296" and is included in the appendix on p. 2166.)

Mr. FLYNN. Many people think that we do not invest our funds now because we just don't have the savings any more that we had in times of prosperity. Here I wish to offer in connection with this a table.

Representative SUMNERS. Mr. Chairman, I don't think anybody thinks that.

Mr. FLYNN. Well, in the course of some lectures I have had that question asked me invariably—"Don't you think, after all, that the people have used up their savings now in the depression and that business hasn't got the surpluses any more and that people haven't got the money to invest?" Of course, there are other reasons offered. I simply say that a great many people do believe that, and I have certainly had the question asked me, and in the course of a rather abundant mail which comes to my desk every morning I think a day doesn't go by that some one doesn't ask that question, and I don't offer the chart for the purpose of enlightening those people particularly, but I merely call attention to that fact. I offer in connection with chart 3 a table which contains the data on which it is based.

The CHAIRMAN. That data was secured from?

Mr. FLYNN. From the Federal Reserve Board. These are based on reports of the Federal Reserve Board.

The CHAIRMAN. The statement may be admitted to the record.¹

Mr. FLYNN. Yes; I wish to use the figures for the moment. Here you have from 1923 to 1930 a period of the most extraordinary boom in industry that this country has ever had. We began with bank deposits of almost \$40,000,000,000 in 1923, and by 1930 these had risen to \$54,000,000,000, something over \$54,000,000,000, so you see there is in round numbers an increase in bank deposits, both time and demand, in all banks, of \$14,000,000,000. These are round numbers. The table which I have here gives the precise numbers.

¹ The statement referred to is included as part of "Exhibit No. 296"; appendix, p. 2166.

Then, of course, we had this great deflation in the period from 1930 to 1933, and then in 1933 there began another rise in deposits to 1937. Now that rise was from \$37,000,000,000 to \$53,000,000,000, or just about the same amount, \$14,000,000,000 again. In other words, in this period of distress and business lethargy, in a period of $4\frac{1}{2}$ years we had as great an accumulation of funds in the banks as we had during the $7\frac{1}{2}$ years of the period of most extraordinary business activity in the country. Of course, the rise in these deposits was due to different causes in both cases. In this case (referring to the period from 1923 to 1930) the rise in deposits was due to private loans, loans made by private business in the banks. In this case (referring to the period from 1930) it was due to loans made by the Government, the sale of Government paper to the banks; but, the Government having made the loans to the banks, the deposits now belong to private individuals because the Government has paid out all these sums of money in relief and recovery and in other ways and the money has come into the hands of private industry, and the deposits now belong not to the Government but the individuals.

The CHAIRMAN. Have you made any efforts to chart the increase of postal savings deposits during that period?

Mr. FLYNN. I was going to mention them without giving figures; I was going to mention them in a general way later. I am merely pointing out this one factor here now.

Here are time deposits or savings deposits in all banks, not only savings banks but commercial banks. Here again I offer chart No. 4, "Time Deposits All Banks," and a table of figures drawn from the American Bankers Association reports, which gives the data on which chart No. 4 is based.

The CHAIRMAN. The table may be received.

(Chart No. 4 referred to, together with attached figures, was marked "Exhibit No. 297" and is included in the appendix on p. 2166.)

Mr. FLYNN. Here again you will see—I won't go into figures to take up your time—a great rise in savings during that period, and while there is not such a large rise, there is a rise of \$4,500,000,000, something more than \$4,500,000,000 in the last 4 years. Over here (referring to the period from 1923 to 1928) it is about \$8,000,000,000, but it is a very large rise in savings on the savings accounts.

Here, however, is the important point. During this period from 1923 to 1930 you had the deposits rising as a result of loans, and this is revealed in chart No. 5, entitled "Total Deposits and Total Loans of All Banks," which I offer for the record, and the table containing the data on which it is based drawn from the reports of the Federal Reserve Board.

(Chart No. 5 referred to, together with attached figures, was marked "Exhibit No. 298" and is included in the appendix on p. 2167.)

Mr. FLYNN. Then, of course, we had this great liquidation of loans from 1929 to 1933 and now, as deposits rose as a result not entirely of Government deposits, because we had a large flow of funds from abroad and these deposits came into the hands of private individuals and of the banks, the loans remained stationary so that between 1933 and 1938 there has been no appreciable increase in bank loans. In other words, in spite of the fact that depositors in banks have today practically as many billions as they had in 1928 and '29 and have in the savings banks almost as much as they had in 1928 and '29, during all

that time, from 1933 to 1938, there has been no appreciable increase in bank loans by the banks. In other words, in 1933 the banks had loans of \$22,000,000,000. In 1938 they had loans of \$21,000,000,000 or a billion dollars less than at practically the low point of the depression.

Representative SUMNERS. Mr. Flynn, may I ask you a question? Have you anything to show the relationship between loans and indebtedness?

Mr. FLYNN. Between loans and private indebtedness?

Representative SUMNERS. Yes.

Mr. FLYNN. No; there are figures on private indebtedness which appear currently from two or three different sources. I have always had some little doubt about the accuracy of these reports on indebtedness. I do not know quite how they get them.

Representative SUMNERS. What I am trying to find out, if I may ask, is whether or not there are any studies to indicate that when bank loans, for instance, decrease, private business may increase. In other words, whether or not at a given time there may be a larger percentage of indebtedness carried by private persons whose debts have not been paid to the bank.

Mr. FLYNN. I do not believe there are any reliable figures on that, and that is one of the reasons why I have great doubt about the accuracy of the data which we get from time to time on indebtedness. I do not think anybody knows how much A owes to B and B owes to C. But this is one figure on which we can rely and which accounts for a very large amount of indebtedness, and it is the kind of indebtedness that grows out of the activity of business, because businessmen go to the banks very largely, and even more largely than ever now, for their money because they had been getting it by security operation. For instance, I believe that one of the large steel companies borrowed \$20,000,000 from one of the banks to put up a mill. Ordinarily they would have done that by a security issue, but they went to the banks for it, and in spite of that fact, there has been no increase in bank loans. On the contrary, there has been a decrease of bank loans. So bank loans now, you will notice, are almost \$20,000,000,000 less than they were in 1929, although the deposits are almost the same. And I offer those figures as an evidence of the complete breakdown in investment, in private investment in this country.

Senator KING. Banks are investing in Government bonds rather than private securities.

Mr. FLYNN. The banks, Senator, are buying Government paper. I wouldn't say they are buying bonds; they are buying Treasury notes and Treasury certificates as a part of the Government's financing of its deficits. But there are banks—I could furnish the committee with the names of banks but I don't think it is necessary to do that—where the cash in the bank's vaults or on its books, and the Government paper, is 100 percent of the bank's deposits, and I have seen some banks where it is even a little more than that, in other words where they have got all of the bank's deposits and a part of its capital in investments and in cash, and I have seen some banks where the cash amounts to 35 and 40 percent, and even 50 percent of the bank's deposits, which is a complete example of how far private investment has broken down.

Now this brings up the question as to whose fault is this? Is it the fault of the bankers? Are the bankers on a lending strike? Are they

trying to discredit somebody or something or some set of principles? Or is it that the people who borrow money are on strike and won't borrow? Or what is the reason? Is it perhaps due to nobody's fault at all? Is it because bankers just are not offered good loans? It is very difficult to determine a question like this. I travel a great deal. I have been in many banks all over the country. I have questioned many bankers. I can't believe that the large number of shall I say New Deal bankers whose portfolios show precisely the same condition as the banks of those on the other side, are on a capital strike, are refusing to lend for the purpose of discrediting anyone. I think we make a mistake, in trying to get at the cause of our troubles, to suppose that they come from any such notion as that. I do not think there is anything a banker likes better than a profit. I don't know anybody who likes a profit better than a banker does, who likes a good loan at interest.

The CHAIRMAN. What explanations do these bankers whom you have approached give of the small volume of loans?

Mr. FLYNN. Most bankers say that the good risks are not offered, and I believe I have seen some evidences of the banks' even leaning over backwards a little bit and actually carrying on campaigns to try to get new kinds of loans.

The CHAIRMAN. Why do they regard the risks as not good?

Mr. FLYNN. After all, there are certain tests of good banking credit. I suppose a man's character would be one thing; also the man's collateral, the man's capacity to pay his loans, the extent of his business.

The CHAIRMAN. It wouldn't be said that there has been any decrease in character?

Mr. FLYNN. No, I think there has been an increase in character the last 4 or 5 years.

The CHAIRMAN. Then we will have to leave character out.

Mr. FLYNN. I am afraid we have hit the peak now and are going to begin to lose a little of our character as we get off the mourner's bench.

Mr. DAVIS. Mr. Flynn, is it not a fact that the ordinary banker inquires into the purpose for which a proposed loan is to be used and gives consideration to whether he thinks it will be a losing or a successful venture, primarily resulting perhaps in a loss to the bank unless the security is so ample that he would not have to give consideration to that?

Mr. FLYNN. I do not think there is any question about that; particularly in the smaller cities bankers like to know a good deal about what the man is going to do with the money. They are not satisfied to know he has good collateral, they want to know the loan is going to be paid without their having to sell the man out.

I think that good loans on the whole are not being offered to bankers. I think perhaps that there is one other factor which cannot be overlooked. I do believe there is just a little uncertainty about things.

Representative SUMNERS. Isn't there a lot of uncertainty about things? We are not afraid to talk in public. If a fellow has some money, he doesn't know where to put it with safety. We might as well put it out on the table.

Mr. FLYNN. That is where the trouble is, that is where it starts with the investor. The investor just doesn't want to borrow money to go into new ventures.

Representative SUMNERS. If he can't pay it back, he is afraid to borrow the money.

Mr. FLYNN. I have said and I have written several times, as a result of talking with bankers, that I believed the trouble was not so much with bankers refusing to lend on perfectly good loans but the fact that good loans are not being offered to them because the better risks simply do not wish to go into any kind of adventures now for one reason or another, let us say uncertainty about the general situation is one of them. I was going to talk about that a little later and I left that point out, but I think uncertainty is playing its role more with the investor than with the bank.

The CHAIRMAN. Would it be proper to say that another cause might be the lack of confidence upon the part of the banker and of the entrepreneur, that he could successfully compete?

Mr. FLYNN. Let us put it that way, then, but I think it originates with the investor who just doesn't want to go into a new industry or doesn't want to expand his present industry, or doesn't want to open a new kind of adventure or enterprise in an old industry, for a variety of reasons, one of which is uncertainty.

The CHAIRMAN. But whatever the reason is, the fact exists.

Mr. FLYNN. The fact exists and there are the figures.

Representative SUMNERS. No one with good sense, if he has money to invest, would let it lie in the bank if he felt he could invest it properly, and when you find it in the bank you know that something has scared him. You don't need charts to tell you that.

Mr. FLYNN. The only thing the chart does is show that it is lying there.

Now here is one more with which I will inflict you. I want to show you the small extent to which private financing has been activating our system.

The CHAIRMAN. Did you discuss chart No. 6? You just took it away.

Mr. FLYNN. No; I didn't want to go into that.

The CHAIRMAN. Do you want it to go in the record?

Mr. FLYNN. I will offer chart No. 6 which is a chart showing security issues from 1923 to 1938, in billions of dollars, and shows the total of new security issues and the new security issues for new funds rather than for refunding. This is based on data which the Commercial and Financial Chronicle have been compiling for ages.

(The chart referred to with accompanying figures was marked "Exhibit No. 299" and is included in the appendix on p. 2168.)

Representative SUMNERS. Mr. Flynn, that is a very interesting chart. Would you mind giving us a little explanation of it?

Mr. FLYNN. Yes; I will do that, but I would like to caution you against this chart a little bit.

The CHAIRMAN. Before you begin to discuss that may I venture to call your attention to the fact that Members of Congress for a number of years have been constantly besought by their constituents to aid the R. F. C., for example, by giving it authority to make new loans to small business, and that all sorts of demands are being made for Government credit to be extended to small business in order to provide for this condition which you have described here on chart No. 6.¹

Mr. FLYNN. Well, I think the failure of the R. F. C.-- I will not say failure-- but perhaps the inability of the R. F. C. to put out any large

¹ See hearings on this subject, Hearings, Part IX.

number of small loans to businessmen is an evidence of the fact that the demand for loans is not there, and may I add, and I hope this will not be taken as offered in any critical spirit at all, let me say that the same thing is true of the bank which the head of the Reconstruction Finance Corporation controls in Texas, which I believe has the largest portfolio of cash and Government securities, the largest amount of cash, of any bank I have seen, and I am not criticizing him for that, because I think he has been doing precisely what other bankers have been doing.

I want to caution you against this chart. The only important issues from the point of view of the thing we are talking about are issues which bring new money into the system. Therefore when one set of bonds is substituted for another set of bonds, although it is a new issue it is not important. But this chart shows the total, which is the black line, and the new issues, which supposedly are for new money, which is the dotted line. But I do not believe that the break-down is quite authentic or accurate, because here particularly you have a large number of stocks and bonds issued to brand-new corporations and which are called new issues, but many of them were investment trusts, a trust formed to sell stock to a large number of people, to create a pool of money which went out into the market and bought existing stock, so that it was not going into a new industry, whatever indirect effect it may have had. So that I think that this chart is subject to a very considerable factor of error on that basis, but at least the comparison can be made over a long period, because in all of these years the same method of break-down was used.

You see the security issues in 1929 reached an enormous total—\$11,000,000,000, of which \$10,000,000,000 were so-called new issues. I think perhaps a fair estimate would take four or five billion off of those new issues.

The CHAIRMAN. In 1929?

Mr. FLYNN. In 1929, because that was the year when a very large number of finance companies and investment trusts were floated and I, Mr. A, instead of going into the stock market and buying a United States Steel stock directly, gave my money to an investment trust which went into the market and bought United States Steel stock indirectly for me, so that it didn't bring new money into the steel industry or any other industry. It may have liberated some other fellow's money that he had tied up in that stock, but it is not, strictly speaking, an issue for new money.

Representative SUMNERS. Why is it that those two lines don't parallel all the way through?

Mr. FLYNN. You mean the black line and the dotted line?

Representative SUMNERS. Take the points. How was that point pushed up except by a new issue?

Mr. FLYNN. If I understand the question you ask, as we approached 1929 why is the divergence between total issues and new issues greater?

Representative SUMNERS. Yes. Just before you get to the last peak you see quite a spread there.

Mr. FLYNN. Right here?

Representative SUMNERS. Yes.

Mr. FLYNN. I am not prepared to say with any certainty why that is so. It simply means that for some reason or other there was a

large number of refunding issues. The difference between the dotted and black lines in this case is made up entirely of the difference between refunding issues and new issues.

The CHAIRMAN. Is there any logical reason why refunding and new issues should run parallel?

Mr. FLYNN. No, there is not any particular reason that I know of.

The CHAIRMAN. It would be quite conceivable that in one particular period of our financial history those who had old bonds out would refund and there would be no new issues at all.

Mr. FLYNN. There comes to my mind one reason which I do recall. There was a very considerable amount of reorganizations in this period, mergers, and the bonds of subsidiary companies being drawn in, and the bonds of the holding companies issued in their place. In other words, new companies X, Y, and Z were being reorganized into a single company and bonds, called company A, and the bonds of companies X, Y, and Z were being refunded with the bonds of company A. There was a great amount of promotional reorganization at that time and that would certainly account for some of it.

The CHAIRMAN. During the years 1933 to 1936, was there not a good deal of refunding for the purpose of cutting down the interest rate?

Mr. FLYNN. Whatever the reason was, and that was one of the main reasons, you see that most of the financing since 1933 has been refunding as against new issues, and here : in these new issues are not all actually bringing new money into the system, for the same reason as applied over here. But there was a great deal of refunding in here, some of it to get lower interest rates. There was a very large number of bonds coming due in here, a lot of financing after the war on 20-year bonds that were coming due in here, and many of the bonds were refunded at this point. But it is inevitable that there would be a lot of refunding going on in here, but it was not inevitable that there would be a lot of new money coming into the market.

Representative SUMNERS. May I ask you one question before you put that away? Take that high peak. Then you come on down. Was there any considerable reduction in the units, the manufacturing units and other business units, that corresponded with the amount of bonds en route? You come to the low peak and you are low both in reissue and in new issues. Does that mean a considerable reduction in the outstanding obligations of corporations, corporations that issue securities?

Mr. FLYNN. No; because this has nothing to do with the total outstanding, but only with the new securities coming on the market. This has nothing to do with the outstanding total. Undoubtedly the outstanding total had declined, because there had been quite a number of liquidations, as you know, but what that amount is I do not know. It has no relation whatever to this chart.

Mr. DOUGLAS. Mr. Flynn, may I ask a question. You were speaking a few minutes ago about the problems of the small business getting its credit or doing its financing on either short term, intermediate credit terms, or long-term basis. In your opinion, from your observation and study, do you think that has any relationship, or any material relationship, to the whole problem of monopoly? That is to say, suppose that you are a very powerful business organization, that you are in fair position of being called a monopoly, and I am a little fel-

low who is trying to get a start in the same field. It may be that in view of your powerful position investors and banks and others would consider me a poor risk. Do you think that has any bearing upon this current problem of the inability of small business, the difficulty of small business, to get its financing done?

Mr. FLYNN. I am not prepared to answer that question, Mr. Douglas. I will say, however, that I recall rather distinctly an incident which occurred back in 1926 or 1927 maybe, when Mr. James Farrell was the president of the United States Steel Corporation, and in an address he made either at a chamber of commerce banquet or American Iron and Steel Institute banquet, some large function in New York, in which he blew off steam. Although he was the head of one of the greatest American corporations he denounced the banks for their unwillingness to lend to small men, and he said, "Now unless a man walks into a bank and wants a million dollars they have got no time to talk to him," or words to that effect, "and if this goes on at this rate presently there will be nobody left but a few big fellows like ourselves dealing with each other."

I think it would be very interesting if this committee were to direct someone to locate that speech and that part of it at least and put it somewhere in the record,¹ because it was the statement of one of the biggest of big-business men talking to big-business men and bankers in New York, and who I assume knew what he was talking about.

Whether that is true now or not I do not know. I rather doubt that that is true now. I think the banks would like to have loans now from little fellows or big fellows.

This chart I believe is rather revealing.

(The chart referred to was marked "Exhibit No. 300" and is included in the appendix on p. 216S.)

Mr. FLYNN. Again I have to caution you against some inaccuracies; it is a chart which I have kept myself since 1934. It is an attempt to measure the flow of new funds into our system. It consists of three items, Federal deficits, money coming from the Federal Government, fresh funds from the Federal Government; State and municipal financing, and private security financing. Now here the private security financing is more accurate because the Securities and Exchange Commission issues every month a very valuable and important memorandum which breaks down all the security issues registered with them into their purposes, so that anything that is called a new issue is really a new issue, an issue that is going to bring money in, an issue to buy machinery, to put up plants; it leaves out all sorts of refunding issues, issues which are put in the Treasury for future financing, issues which substitute stocks for bonds and bonds for stocks, and so on.

The white line represents the Government deficits. I did not take Government loans because Government loans are made at infrequent intervals, and it would constitute a rather unbecoming and not very illuminating chart, but the deficits rather indicate the manner in which the new funds flow out into the system. The shaded lines represent the new financing of States and localities, counties and cities, and the black lines or black sections indicate the new private security financing.

¹ A speech delivered by James A. Farrell, president, United States Steel Corporation, at the 37th general meeting of the American Iron and Steel Institute held at Hotel Commodore, New York City, May 9, 1930.

Now we needn't do any more than merely glance at that chart to see how small a part private security financing is playing in furnishing funds for the system.

Here in 1936 is the period of the bonus. I have had to take liberties with the bonus because it was all done in 1 month, that is to say the issues all in 1 month, and it would have made a line so high, so I spread it over 3 months. The effect so far as the system is concerned is quite the same, and that would represent more nearly how the funds went out, but you see that there has been no important pick-up, since 1935 or 1936, in private financing; the shares get a little bit larger here and there, but do not amount to very much. I think you will probably find that during 1938 the total is very much smaller than it was in 1937, and than in 1936. So it exhibits no recuperative energy whatever.

Here you have this gentleman C—whom I was talking about before you came in, Congressman—who is manufacturing investment goods, in a state of collapse because nobody wants to buy his goods, nobody wants to absorb the savings of the society, and that is the point at which your capitalist system breaks down. Now if you want to make it recover and if you want it to continue to recover you have to repair it at that point. Whatever you do that will increase private investment will bring about recovery, even though what you do is morally bad. I am not discussing that now. Whatever you do that impedes the purchase of investment goods, which means the flow of investment funds in the system, will impede recovery.

I would like to get rid of those charts so we can get our minds off of them.

Senator KING. Before you leave that, may I ask a question? To what extent has there been a loss of capital to the investment during the boom and following the boom in large apartment houses and large buildings and the decline which has occurred? I was told in New York a few days ago that they could not sell a large part of the real estate, particularly the large buildings, for 25 percent of the assessed value, and that not only millions but hundreds of millions of dollars have been lost in the decline in the value of real estate, and to that extent capital had been impaired or wiped out in many companies.

Mr. FLYNN. Now you are talking about ponderable and real capital as distinguished from money capital.

Senator KING. Yes.

Mr. FLYNN. There is no doubt whatever that not only in New York City but in every city the losses of savings which were put into real-estate investments up to 1930 and even partly through 1930 have suffered the most appalling impairment. That was due to the fact that largely the investments in the first place were utterly indefensible; it was due to the fact that promoters had discovered a new way to exploit the real-estate bond. It was one of the reasons why, I think, the collapse of our system did not come in 1928 rather than 1929, or maybe even sooner than 1928. I made a rather bad blunder. I wrote a piece in one of our magazines in 1927 predicting that it would come sometime in the fall of 1928; I have rather suffered a good deal of chafing at the hands of some of my friends because after 1928, you remember, it got even better and collapsed in 1929. I think what not only I but a great many other men who follow these figures did, was to fail to take note of the extraordinary development of the real-

estate bond all over. Now in the past money for real-estate construction has been obtained from more or less seasoned and cautious individual lenders. When a man wanted to put up a building he had to go to a lending agency of some kind which was using its own money or the money of some client who could supervise it, and that lender was able to determine when the time for lending on construction was at an end.

In 1927, 1928, real-estate values in New York had gone all out of reason. The production of fine apartment houses, apartment hotels, commercial buildings of all kinds, had been overdone and any man using his own funds and experience in lending in the mortgage market would lend no more money, but unfortunately the lending was being done by promoting bankers whose interest was not so much in the security that they were getting for the money, but in the large profits they were making out of selling the bonds to utterly inexperienced investors. So we had a wave of corporations formed to put up individual buildings. If you look through the records you find the Fourth Avenue and Tenth Street Corporation, the Main Street and Twelfth Street Corporation, in small cities as well as big cities, and the bonds with which these buildings were put up were sold to teachers and to small investors by the billions, and they were sold all during 1927, 1928, and a lot of them in 1929, and buildings were being put up, moving-picture theaters, skyscrapers, apartment hotels, and hotels, long after the market for these things had, measured against the demand of that day, been completely glutted and they should never have been put up. It was because those of us who were watching that situation at the time were not aware then of the virulence of this phenomenon. That is why these people lost their money. Obviously people who have lost their money like that are very cautious about putting in any more of it.

Let me give you an instance. A gentleman came into my office in the beginning of last summer, a very able physician in up-State New York, and he said he was on his way to Europe. He said, "Back in 1928 an endowment policy for \$10,000 which I had been paying on for many years came due, and I was doing very well so I took the \$10,000 out and invested it in something"—I forget what he invested it in. He said, "I lost the entire \$10,000, and I had my 20 years of payments for nothing. Now," he said, "I have just had a \$5,000 endowment policy come due and I am taking my wife and daughter to Europe. We are going to get something out of this \$5,000." He didn't want to invest it. He had been burned, as so many others were.

Here, by the way, are some figures on building construction, which has almost completely gone by the boards.

(The chart referred to was marked "Exhibit No. 301" and is included in the appendix on p. 2169.)

Mr. FLYNN. I have used the figures of the F. W. Dodge Corporation. Here you see building at its peak in 1928. You see it began to slough off until there was almost nothing, idling along, but here is the important point. Now it has risen slightly, but this is the privately financed building here, and the difference between this and this is the publicly financed building. In other words, if the Federal Government were not building and financing building in various ways, building in States and schools and so forth, this privately financed line would be the line of building.

The CHAIRMAN. Does the lower line include building which is carried on by reason of the Federal Housing Administration's short loans?

Mr. FLYNN. This includes everything.

The CHAIRMAN. The lower line.

Mr. FLYNN. Oh, no; that is privately financed, and the Government merely guarantees the banks.

The CHAIRMAN. So that is included in the lower line.

Mr. FLYNN. That is included in the lower line.

I don't want to go on any further with these charts.

Representative SUMNERS. On that lower line, has there been any break-down to show how much of that lower line is represented by investments that are entirely privately financed, and those which get some assistance from the Federal Government by guarantee or any other way?

Mr. FLYNN. That lower line that is marked "privately financed" excludes all financing done by the Federal Government in part or in whole, but it includes the financing of houses which have been built with money which comes from banks and other institutions, but which are guaranteed by the Federal Government, that is not financed by the Federal Government, the Federal Government merely operates the guaranteeing agency.

Representative SUMNERS. Has there been any break-down to show how much of that lower line is not at all dependent upon governmental guarantee or a guarantee of any governmental agency?

Mr. FLYNN. I am not in possession of that break-down, but I assume it could be very easily done because the Government has records of the amount of construction which it has guaranteed. The Federal Housing Administration can furnish figures to indicate how much of the privately financed business they have guaranteed.

The CHAIRMAN. It has, of course, issued its reports from time to time showing the amount of guaranteed loans in every State in the Union.

Mr. FLYNN. If you wish, Congressman, I think that figure could be very easily obtained. I should be very glad to do it and offer it here in connection with this chart.¹

Representative SUMNERS. I hope my colleagues will be glad to have it.

The CHAIRMAN. We will all be delighted to have it.

CAUSES OF FAILURE OF PRESENT ECONOMIC SYSTEM

Mr. FLYNN. What I have been trying to make as clear as possible, not only for you but for those who are interested in this presentation, is that this investment goods industry is the central power station of capitalist money economy and that it has practically collapsed and that what we are interested in is the causes of its collapse.

Now I assume that various causes could be assigned. One might say the general uncertainty surrounding business is one of the causes that men do not wish to invest, and certainly surrounding the value of money, for instance. Perhaps you will find a reason in taxes, local taxes as well as Federal taxes. I think that is a subject open to debate. I do not think it is open to debate on the subject of local taxes which are, I think, a great deterrent to the construction industry, but, I

¹ Mr. Flynn subsequently furnished the data requested. It is included in the appendix on p. 2302.

believe, as I set out in the beginning of my thesis, that monopoly practices in the building industries play a large part in the inability of the construction industries to revive. In other words, if you could settle the uncertainties which surround the general economic situation and if you could improve the taxes somewhat—I doubt that you will—you still would see no revival or extensive revival in the building industries because of the conditions in the industries themselves.

I should like at this point to call attention to the fact that investment is not an abstract thing; men do not invest in abstract values, but in particular industries, and you have to look for the cause of the break-down of investment not only in the general economic scene but also in the conditions in the industries in which investments must be made. Thus investments would be made in the railroad industry, if they were made, in the utilities industries, in the manufacturing industries, in the building construction industries.

But I also call your attention to this fact: that in whatever industry you invest, most of the long-term money that goes into that industry, whether it be utilities, railroads, manufacturing, or what not, goes into construction, it goes into two industries—in the construction industry and the heavy machinery industry; that is to say, when a man raises \$100,000 or \$200,000 or \$1,000,000 to start a new factory he puts a large part of the investment, the capital money, into the plant itself and into the machinery with which he fills the plant, and keeps a reasonable amount for his current assets. So that the conditions in the construction industry affect all industries, affect investment in all industries, but you must look in the particular industries for the peculiar conditions which obstruct and destroy investment possibilities, and in the building industries one of the most important of them, I believe, is this business of monopoly practices, because there is probably no industry which is fouled with them, so bound up and constricted by monopoly practices, as the building industry, the construction industry.

Senator KING. Do you include in that labor?

Mr. FLYNN. I include most certainly labor in that. But in New York City in 1919—in '18, '19, and '20—we had a very severe housing shortage. Construction had practically ceased; we were demolishing more houses than we were building, and we were building practically none. The situation became an emergency one; the legislature was called in special session to stop riots among people because rents had been raised 100 percent and 200 percent, but in spite of the fact that rents had soared so high it was impossible to get houses built; nobody would build them. The legislature ordered an investigation of the building industry, and that was conducted by Mr. Samuel Untermyer, a very great lawyer and a peculiarly talented investigator. The results of that investigation are to be found in what is known as the Lockwood hearings, a joint committee of the House and Senate, and in the course of that investigation Mr. Untermyer revealed a maze of monopoly practices covering every phase of the industry—the manufacturers of building materials, the dealers in building materials, the subcontractors who bid on work, and labor themselves, labor rackets. He sent Mr. Brindell, the head of the building labor groups in New York City to the penitentiary; he put quite a few of the building material and building manufacturing and subcontractor people in jail; and indicted a great many more he didn't put in jail because I

suppose they became fatigued with the whole hunt after awhile and immediately following that investigation, which did successfully at that time and for a limited period break up the monopoly hold on building in New York, there came into being a wave of building in New York City the like of which New York City has never known.

Unfortunately, after a few years of that, along in 1925 or so, the agreements and combinations began to come back. Mr. Brindell was succeeded by Mr. Brandell, who was also convicted in his turn later, and Mr. Brandell, I think, by Mr. Commerford, in the labor field. The building subcontractor group began to get together again and are still operating; the building material dealers got together again and are still operating, and New York City is today constricted and bound by monopoly practices in the building industry which make it impossible for any man to build for profit in New York City.

The contractor can get nowhere; he can't make very much putting up a building. The man who puts up the building can't hope to make a profit out of it, and of course he does not build.

This is true not only of New York, of course, but is true all over the country. Let me give you an example taken from the records of the Federal Trade Commission, and here you have the thing you were talking about, Senator, this self-rule in industry. This, it seems to me, is the crux of the monopoly problem at the present time. I do not mean that large-scale, powerful corporations do not engage in monopoly practices, in some cases in perhaps what amounts to monopolies, but the monopoly hunt has now turned in the direction of the little monopolies, the groups of small-scale operators who wish to organize into guilds for the purpose of monopolizing the industry for themselves. Now you hear a great deal about self-rule in industry and the rules of the game and the adoption of codes for the purpose of ensuring fair trade practices. I have been watching the performances of businessmen in these groups for many years.

I have gone to immense trouble to go to their meetings, their conventions, to examine their agreements, to follow their investigations, and I have discovered that while they like to adopt codes announcing high moral platitudes governing their conduct, and proclaiming forms of ethics to govern them, that what they are really interested in is not that kind of fair competition, but in controlling the economic factors in the province of industry in which they operate. They want to control production; they want to control prices; they want to limit the industry to themselves and keep out newcomers. They want to control competitive conditions, and all during the years from 1922 to 1929 the most extensive and energetic efforts were made to adopt codes of practice of all kinds.

Many of them came before the Federal Trade Commission in connection with their fair-trade-practice operations, and on the surface many of them were all right. The Bankers' Code, I remember, began with a very beautiful statement that "We, the bankers of America, hold that our first duty is to guard the flag, and to the Golden Rule, to do unto others as you would have them do unto you." And in the Truck Drivers' Code the first article was, "Never argue with a policeman."

But in fact what these gentlemen were interested in was in limiting production and controlling prices and regulating competitive practices, and while they didn't put those things into codes, they set up institutes

and academies, and they became academicians, and they organized themselves into code committees and these committees, under the apparent authorization of the code, got together and dealt with the prices.

I remember at that time the wave of code making which swept over the country was so extensive that in one of our large cities—we will leave out its name—the ministers decided to have a code, and what do you think the ministers put in their code? Well, one of the first things was that they were entitled to 2 weeks' vacation, no matter what happened; and, secondly, they had a guaranty of territory, that is to say, they had an article which provided that no minister could proselytize in the congregation of another minister who was a member of the association.

The CHAIRMAN. Was this division of territory confined to the temporal world?

Mr. FLYNN. It was in fact, because I believe the code died. But you couldn't, if you were a minister, snatch a brand from the burning if it was burning in the tree of a fellow member.

That is what they are interested in in the codes and in self-government, and when you hear this talk about self-government in industry, that is what it is.

Take this building industry down in Florida. Down there they set up what they called the Florida Building Material Institute, and they had an office in Orlando, Fla., and they had 280 retail dealers in this institute. Now, mind you, building materials flow to the contractor through the dealers. They represented about 75 percent of the building-material-purchasing power of the State and they had 47 associate members who were manufacturers and wholesalers, and about 288 of what they called cooperating manufacturers.

Now, what were they organized for? The Federal Trade Commission investigated them thoroughly. They were organized to establish a class of recognized dealers, to have all building materials flow through those dealers, to compel manufacturers to sell only to those dealers; and to regulate prices, terms of competition, and the admission to the right to be a dealer. No man could be recognized as a dealer who was not authorized by this institute, and they sought to limit the number in the business in any given territory.

The CHAIRMAN. That was a definite limitation upon opportunity, was it not?

Mr. FLYNN. It most certainly was, as we shall see.

They set up a scale of prices for everything that was sold and they sent these lists of prices out to all dealers. They went out from a central office. They compelled members to observe these prices. They fixed credit conditions and they parcelled out territory to dealers. They said, "You can operate in this district, and you in this district, and you, Mr. A, must not operate in the district of Mr. B."

How did they effect compliance with this? First of all you had to put up a large sum of money to join. You had to pay \$500 to \$1,000 or more, depending on how large your business was. Here was a business called the Reliable Supply Co. of Florida, in Miami. It was one of these concerns that did a business of about \$135,000 a year.

The institute secretary went to the district, or rather the president of the district—no; the institute's secretary, at Orlando, went to the president of the district. They were organized into 15 divisions and each division into 5 districts. They had a little federal government down there. And the secretary from Orlando went to the president of the district in which the Reliable Supply Co. was located and told him that Mr. Blank, of the Reliable Supply Co., would have to join the institute if he wanted to do business in Florida. So they went to him and told him that to join he would have to get the approval of the association in his district; that is to say, of his rivals, and he would have to put up \$1,000, and he refused.

Now then, what did they do? They found out by a system of espionage the names of the concerns from whom he bought his material—Bragg Lumber Co., Brightbrooks Lumber Co., McEwen Lumber Co., and a very large number of concerns that sold lumber, millwork, gypsum, plywood and a number of other things, in Florida and all over the South, and having got the names of all the people from whom he bought his goods they sent word to these dealers and said, "The Reliable Supply Co. is not a recognized dealer, and if you sell to him we won't buy from you. The trade of Florida will be closed to you."

And so one by one these gentlemen informed him that they were sorry, but they couldn't sell him. They liked his business; his credit was good. They wished they could do something about it, but they just could not sell him—all of them. And during 18 months that company received orders for \$100,000 of Georgia pine and couldn't, all over the South, fill more than five or six thousand dollars' worth. The president of the company testified before the Federal Trade Commission that the company had been destroyed by that concern.

Now what was it? It was the ruthless activities, not of a big monopoly but of a whole group of little monopolies organized in a guild.

The same thing in California. The Federal Trade Commission issued a cease and desist order.

Mr. DAVIS. Mr. Flynn, before leaving the Florida case I suggest it might be noted in the record that the Federal Trade Commission issued a cease and desist order against those people directing them to cease and desist from those various practices.

Mr. FLYNN. I was going to give one other case and then say that the Federal Trade Commission had issued a cease and desist order. The Federal Trade Commission issues a cease and desist order; presently it breaks out in some other form, and the only way in which you can put an end to this kind of thing and stop it completely and keep it stopped is by ceaseless, relentless pursuit. It is like the rackets. You can break up rackets. Rackets are being broken up in New York City. But they can be broken up, not by an occasional investigation, not by a commission which has not sufficient staff and sufficient funds to cover this immense land with all these innumerable rackets such as this, but only by an immense effort, commensurate with the efforts of the monopolies themselves.

Representative SUMNERS. Mr. Flynn, you never can settle anything or stop anything. You just have to keep scratching at it, don't you, all the time? That is where we make the mistake. If one might be permitted to make an observation in this connection, we go ahead and do something and then go to sleep and think the thing will stay done.

Mr. FLYNN. That is correct. I know one racket in this country called the free-lot racket that has been on the agenda and in the program of the crusading newspapermen for the last 30 years. Every crusading newspaperman in every town takes a crack at what is called the free-lot racket and breaks it up in his town, and the year following another newspaperman breaks it up. I broke it up once myself when I was a newspaperman, and I see every year it is being broken up in New York City. But it just doesn't stay broken up.

Representative SUMNERS. It is a good thing it doesn't stay broken up, because it is necessary for us to stay on the job, isn't it?

Mr. FLYNN. It is necessary to be vigilant to break it up. Perhaps if evil went out of the world, Congressman, we would all get flabby, particularly us investigators. We have to have some evil to charge at. I believe Mr. Thurman Arnold once said that that was part of my stock in trade, chasing after the evils of the capitalist system. I am not prepared to admit that, but it does keep some people's muscles in shape. But a great many people suffer a great deal from it, and right now the whole country is suffering from it because of the collapse of our system, and I think this is one of the things that makes it collapse at this key point that I am talking about, this building industry.

Here you have cement. The Federal Trade Commission, I believe, is investigating that now, and what I say to you I take merely from its complaint. They charge that the cement industry has a central organization like this Florida institute to limit distribution to recognized dealers. One must be a member to get into the guild; I mean, one must get the support of members to get into this guild. It limits distribution by railroad transportation and excludes trucks because transportation by truck tends to break up the basing point system structure, price structure. It prevents the sale of building materials directly to the Government, so they have got to buy through little dealers all over the United States. It compels manufacturers to sell only to recognized dealers and prevent new dealers from getting into the business, and it apportions territory among the dealers.

There is a case not far from my own town, New York, in New Jersey. A man there had a business where he sold cement and ready-mixed cement which is coming to be quite a business now, and he thought he could sell cheaper if he could go to the cement works in the Lehigh Valley where he buys his cement with his own trucks and haul it back to his place. There is a legitimate form of transportation, and he bought a hundred thousand or more dollars' worth of trucks. Well, when he went to get his cement from the Lehigh Valley people, they told him that there was a 15-cent a barrel extra charge on all cement that was hauled away by a truck instead of by railroad transportation.¹

The CHAIRMAN. Mr. Flynn, you have pointed out, I think, that this cement industry is now under investigation by the Federal Trade Commission, so that it is a matter that is in process, and perhaps in view of the fact that the Federal Trade Commission is supposed to be the sponsor of this particular hearing now, it might be well for us not to go into it.

Mr. FLYNN. Very good. I was doing this on my own responsibility and taking it from public records, the complaint which is a matter of public records—maybe it isn't true; maybe it is just a rumor.

¹ See testimony on basing-point practices in industry, *infra*, p. 1861 et seq.

The CHAIRMAN. I knew you were.

Mr. FLYNN. Well, now, gentlemen, what can you do about all this thing? You see, this is very closely related to the racket, the criminal racket I speak of. The rackets that we have in New York City and Chicago and Philadelphia and Boston and other big cities arise out of this notion of dealers and businessmen that they have got a right to organize among themselves for the purpose of limiting the business to themselves and regulating price structures. For instance, you read in the papers about the attack on the racket in Brooklyn, but when you get down to brass tacks you find the racket consists in the employment of gangsters, a gangster group, to act as a compliance department of the bakers. If a baker joins the association, they give him a guaranty that nobody is going to open in his block or across the street or within a limited territory from him, and they guarantee that none of his competitors are going to undersell him, and if they undersell him, why they get a brick through their windows or they have their counters and their machinery smashed up by the gangsters.

Senator KING. And they have their personal property destroyed by acids and explosives.

Mr. FLYNN. Yes; they'd throw stink bombs into a restaurant and promptly that empties the restaurant and keeps people out of there for a long time after that.

Now, that is done as part of this principle of self-rule in industry. Unfortunately, however, when you call the gangsters in to do a thing like that you surrender yourself into their hands and presently the gangsters are running the whole business. But that is the racket. It is in the poultry business; it is in the butcher trade; it is in the fish business; it is in the bakery business; it is in the restaurant business; it is in the laundry business; it is in various businesses of that type all over the big cities of America.

It is only a phase of this monopoly business.

The CHAIRMAN. Did you ever hear any intimation that it was in the newspaper business?

Mr. FLYNN. I never heard anything derogatory of the newspaper business in my life, Mr. Chairman. [Laughter.]

So this demand for self-rule in business goes on continuously year after year. It is as old as the capitalistic system, and what are you going to do about it? There has been a demand which has flooded over into what might be called the liberal ranks for some kind of regulation of business, sometimes it is called planning. I have no objection to planning, but I do not think you are planning when you call in the large manufacturers of steel and say, "Gentlemen, now write your own ticket." That is what the N. R. A. said to them. Mr. Donald Richberg testified to that, and they wrote a code which made the American Iron and Steel Institute the code authority for the steel industry, and thereafter the board of governors, I believe, of the American Iron and Steel Institute sat as a legislative, executive, and judicial body, not elected by the people of the United States, but by the members of the Iron and Steel Institute, with a code authority, the members of which were the manufacturers of steel who had a vote in proportion to the amount of their steel volume, the dollar volume of the steel they produced, and they sat down and made laws for the steel industry, and I suggest that you gentlemen sometime just go get the record of their legislation. They dealt with all kinds of things.

They passed laws as to what is a jobber and who is a jobber. It was decided by this institute, acting with the authority of the Government, that I was a jobber and that you were not a jobber, that you could not be in the iron and steel industry unless you came within the terms of their definition of a jobber.

Now, this is called self-rule in industry, and I contend that not only is this not self-rule in industry, but in my lifetime this was the most appalling attack on democracy that I have ever encountered. By democracy I understand a form of government in which those who are governed do the governing and choose the instrumentalities and agents by which they are governed.

Senator KING. Mr. Flynn, you mentioned the iron and steel industry, and the rules and codes established by it under the N. R. A. Was not the same course adopted by more than five or six hundred of the industries of the United States, and their practices were just as pernicious as those in the iron and steel industry?

Mr. FLYNN. Senator, I don't remember the number of codes but I think it was over 600.

Senator KING. Yes.

Mr. FLYNN. I am not dealing with the fact whether they were pernicious or not. I am talking now about the democratic character of this Government. Let's assume that they made good rules and regulations, that they were benevolent. I don't think you have a right to assume that, because you are turning over the government of a province of our economic Nation, our economic landscape, the province of steel—you are turning that over to the men whose interest is in profit.

The CHAIRMAN. You are surrendering the power which the Constitution gave to Congress to regulate commerce among the States.

Mr. FLYNN. That is correct. But whether the Constitution gave it to them or not, the point I am trying to make is that what you did was attacking the democratic form of government. In other words, I would like at this point—

Representative SUMNERS (interposing). You are attacking the democracy of opportunity.

Mr. FLYNN. I wouldn't put it that way, Congressman; I might agree with you on that but I want to make this point if I can. The Fascist principle of government has been a good deal confused in the minds of the American people because they see it in terms of its externals, the marching "black shirts," the "brown shirts," and the fellows saluting the fuhrer, and the fuhrer himself, and all of the impedimenta of the sales department of the dictator who makes all kinds of emotional appeals to his people, incites them to war, and does all that sort of thing. But back of all that the central idea of these people in Italy, and in Germany, was an attempt to control the economic system. There is a kind of general understanding now among people of all kinds, liberals and progressives and conservatives, that you must control the economic system. The progressives think that the Government ought to do it, perhaps. The conservatives, the business community, thinks it ought to be left to the businessman. At all events, in Italy and in Germany there rose up from the middle classes and from big business a demand to control this economic system which was in collapse, and it is a very natural thing because as I have told you at the outset, here is our own economic system which has been

on the downward side at least 15 out of the last 25 years, and it is natural that the millions of people who suffer from this should be very fatigued with suffering. It is all right for those of us who if we don't make \$5,000, make \$3,000, or if we don't make \$10,000 make \$5,000, but for the 11,500,000 people who make nothing and depend upon the Government payments, and for the millions who are not on Government relief, who do not make enough to live—they grow weary and tired and fatigued with all this thing, and the hundreds and hundreds of thousands of little-business men, with stores and shops and factories of all kinds, who year after year after year make no profit, get tired, and so they say, "We must control this system."

In Italy Mr. Mussolini conceived the idea that the State must be divided into two compartments, the political and the economic state, and the political state should be ruled as the state has already been ruled, by representatives of the people, but that the economic state should be ruled by representatives of industry, and so Italy was organized into corporatives. I think somewhere around 1933 and 1934 the plan was put into effect, although this was his idea from the beginning, because Mussolini had been a syndicalist and it was very easy for him to introduce his idea of radical syndicalism in the field of employment. The employers were organized into what he called corporatives, what we call trade associations. The labor people were organized into labor associations, and federations of corporatives were formed.

Now then, you had in theory two groups of lawmakers, one making laws for economic society and one making laws for the political society. The old Chamber of Deputies still survived as the top law-making agency for the political society, but all under the dictator.

Well, what happened in a society like that? Inevitably the economic concerns of the people are closer to them day after day than these ideas of political government, and little by little you had these conflicts between the economic society and the economic lawmakers on one hand, and the political lawmakers and authorities on the other hand, and the political lawmakers being pushed off further and further and further into the corner and the economic lawmakers assuming a larger and larger share until the end of it was that the Chamber of Deputies under the authority of the Duce met and declared its extinction, and a new form of government was set up in which the economic provinces of the kingdom were represented through the corporatives, through the code authorities.

Now, it seems to me that looks like a long, long journey for the United States to travel, but you always travel to an objective by taking the first step. You begin to develop your society in a certain direction, and you must either retrace your steps or go on developing in that direction, and what happens? You set up these corporatives, you set up these trade associations—because we didn't provide for the labor unions having any part in this. They could come in and make a kick about their labor conditions but they had no part in the administration of the codes except in a few industries. Codes were administered, and the trade associations are administered by the employers and the employers make the rules and regulations and if we surrender that rule into the hands of the employers, we have something which is the very reverse of democracy, because the people who are ruled by it, namely, the workers, all the innumerable entre-

preneurs who must buy from these top-ranking employers, and the people whose province that is—because after all the province of steel as such belongs to the people and not to the steel executives—are ruled by one of the groups, the employers, and that is not democracy.

Now, that may be a good way to run our society. Maybe some man can prove that. I am like the Irishman, I am open to conviction on that point, but I would like to see the color of the man's hair who could convince me on that point. I am too much devoted to the democratic form of life, no matter how bungling it may be. But maybe somebody may be able to convince the people of the United States that there is a good way to do it. But it is not democracy. It is the reverse of democracy and inevitably leads away from democracy, because having started that form of government you must go on perfecting it and developing it, and presently you begin to find evasions. Price lists are fixed, forms of competition are fixed, production quotas are set, territory is assigned, but men refuse to comply with them. Then they find evasions as they did out in California where one man was excluded from the institute, and so he had to literally bootleg his lumber. His foremen had to get up at 3 o'clock in the morning and open the doors of the lumberyard to allow the bootleg truck to come in with a load of bootleg lumber, bought from a friendly member of the institute who was selling him because he was a friend but who was afraid of being put out of business for selling him lumber; and another concern would deliver him lumber on a boat and the boat would land in the middle of the night at a dock and put the lumber on the dock without any marks or identifying labels of any sort, and then his truck would go to the dock at 3 or 4 o'clock in the morning and pick up the lumber and bring it to the yard.

Of course, you have to do something about that, you have to meet that evasion, you have to have compliance machinery, espionage men, you have to have industrial police, commercial police, you have to make new rules and regulations, you have to give more cooperation to the corporatives. Now you are developing your system, and having gone forward in the development of that system, you will develop it so far that you cannot possibly retrace it, and when you have gone to a certain point you cannot make it work unless you have a compliance machinery which only a dictator can operate, and he can't do that in a democratic society. Once you start this thing, I don't know whether it will take 25 years or 50 years, but I know if you start it, you will wind up with your democratic society destroyed.

Now, if you are not going to turn it over to the individual businessmen under the pretense of self-government to run, then you have got to have the Government run it, and the Government can't run it. You gentlemen know that. You tried to run prohibition; you tried to run the liquor industry. You just cannot prevent a man from pressing a pair of pants for 35 cents if he is willing to do it for that, and put him in jail for charging 25 cents, as we tried to do. You cannot enforce it. You are trying to enforce rules of behavior, rules of conduct.

They set out in these codes how a man's books should be kept, how a man's labor records should be kept, how a man's invoices should be made, what his terms of credit should grant. You can't supervise the enforcement of that without a vast machinery and without a dictatorial power in the hands of the enforcing machinery.

Government can't do it. Individual industry might do it, because they are all in favor of that. Government can't do it, and the Government doesn't want to do it. Business doesn't want the Government to do it, and, therefore, it can't be done unless you turn it over to business itself, and then you have to kiss democracy good-bye.

The CHAIRMAN. But when business does it, eventually the result is that Government does it, as demonstrated in Italy and in Germany.

Mr. FLYNN. Gentlemen, as a matter of fact, this is not the first time this has occurred in the world. We had it in the guild system, which came along toward the end of the Middle Ages, and the guild system finally got the economic system of that day so tied up with rules and regulations, precisely like the rules and regulations our code authorities made and our trade associations make now under the guise of self-rule in industry, and that are made by these lumber and building material institutes I tell you about—precisely the same, even to rules as to personnel rating, which is one of the favorites in some of these codes.

They did all these things. They even had a religious concept back of it, the concept of the just price, brought up to date by Thomas Aquinas 300 years later. They said profit was unholy and interest was usury. They didn't glorify profit as we do now; and so they tried to keep profit down.

Profit began to break up the guilds and began to operate on a large scale outside of the guilds. But even after the old guild system had been pretty much weakened and debauched and destroyed, it continued to grow numerically in France, and at the time of Louis XIV, Louis XIV took over all the guilds one by one. The Government took them over and began to operate them in the interest of the Government, and when the Government took them over they began to disappear, because they didn't want to be regulated by the Government. That is what you will have to do here.

The CHAIRMAN. Don't make the prediction that we will do that here, because I don't think we will. Let us deal with the facts. That is what has been done in Germany. That is what has been done in Italy. But let's pray that it won't be done in America.

Mr. FLYNN. Let's not be sure what we may or may not do. I think perhaps I have become suspicious about this thing. I have been watching it so long and have been fooled so many times. In 1922-29 we had a wave of these things and when Mr. Hoover came in he was full of doubt about them. I don't know why, but he put an end, or rather he tried to check the growth of, this self-rule in industry business.

I don't know whether you gentlemen remember that or not, but there was quite a row between the Department of Commerce at one time and Mr. Daugherty about it. Mr. Hoover wanted them to permit their getting together for the purpose of making certain harmless regulations and collecting data and statistics, and Mr. Daugherty said that was illegal because it was a means of fixing prices, but that is as far as Mr. Hoover went.

I thought the thing died down. Then Mr. Hoover went out of power and I, having been an old-fashioned liberal, settled back into a kind of security. The last thing I thought could happen was that all the codes that had been framed, mostly under Mr. Coolidge, and all the gentlemen who had framed those codes, would be called into

Washington and told to write their own ticket. In fact, when I saw that, I didn't believe it. I read it in the papers, but I was like the countryman who saw the giraffe in the zoo. I said, "It just ain't so. I don't believe it." And it took me a week or two to wake up to the fact that the thing I had hated most as a threat to democratic government was being brought in, I think for wholly innocent reasons, without realizing at least what it all meant—was being brought in by the liberals of America.

So I would not be too sure as to whether we will do this or not, but I know that there is a widespread feeling for it among business. They say, and with some reason, "We are in trouble."

The CHAIRMAN. I just want you not to be too sure that it will happen.

Mr. FLYNN. I hope and pray it will not, and I shall do all I can to stop it.

Senator KING. May I say to Mr. Flynn that there are some evidences of a very powerful trend toward State socialism which is just around the corner from communism?

Mr. FLYNN. This is not State socialism, it is an entirely different thing. It is the first step in the direction of fascism.

I would like to make one or two observations, and then, gentlemen, so far as I am concerned we will dismiss school.

The men who want to do this, defeat their own purposes. Here is what they want to do. They want to cut down production because they believe that if they produce less they can get higher prices out of the income which is abroad in the land. In other words, they feel that if they produce 5,000 pairs of shoes instead of 7,000 pairs of shoes, that the income that is available to buy shoes will buy those 5,000 shoes at a higher price. But if you recall that first chart which I brought here—and this is one of the reasons I brought it—when they cut down the production of goods they also cut down the production of money income.

The CHAIRMAN. In other words, we cut down the reservoir to which they must repair if they are going to make a profit.

Mr. FLYNN. Correct. In other words, there is not as much income as there was before they stopped cutting it down, and while they produce fewer shoes, there are fewer dollars in money income to buy those shoes, and while one industry can do it, as some of the great organized corporations, and perhaps get away with it, if any considerable number of industries do it they would promptly throw the whole system into reverse and collapse, so they don't succeed.

PROPOSED ECONOMIC REFORMS

Mr. FLYNN. What can we do about it? I don't think we should do nothing about it. I think there are some things we can do. I think we have got to have some kind of control. In the first place, I do believe that it is the function of the Federal Trade Commission to prevent men from doing unfair things. I think a man is entitled to a fair chance in his business and that that is perfectly proper and legitimate form of legislation. You can get a public sentiment on that. No man ought to be permitted to go out and intimidate another man's labor; no man ought to be permitted to use commercial bribery against the employees of his competitor or against the employees of the man

to whom he sells. Men ought not to be permitted to engage in falsifying. There is a whole group of things which men do, unscrupulous traders, do, which they ought not be permitted to do and which you can prevent them from doing if you make your preventing machinery sufficiently extensive, and you can get a public sentiment behind that kind of thing from business itself as well as from the public, and you can afford that kind of thing. But the trouble is that that is very different from permitting these men to get together to regulate the economic factors in their industry—this matter of production and price and the number of competitors they shall have and competitive terms of credit and that sort of thing that ought not to be permitted.

In the second place, I believe that we ought to take out of the hands of certain men the weapons which we put in their hands. Some of the weapons they used are not natural weapons which they get from God Almighty, but they are weapons which they get from the Government, and one of them is the corporation. Now, I do not mean that the corporation is a bad weapon. I am in favor of corporations. I do not believe in our modern technological civilization that you can operate without the corporation. It is a device to enable a number of men to unite their resources in pursuit of a common object. But I think when you have gone that far you have done enough.

I should like to answer Commissioner Douglas' question put to Professor Fetter, "Do you believe in holding companies"? I believe the holding companies should be barred. I would like to call attention to the fact that not only did Woodrow Wilson speak against this thing, but some time back in 1911, I believe it was, the President of the American Bar Association, speaking to the American Bar Association, himself a leading corporation lawyer in the United States representing the railroads and large corporations of all kinds, warned them the greatest mistake that the American people had ever made was to permit one corporation to own the stock of another corporation, and that they would live to rue the day they had done that. That did not come from a radical; that came from a lawyer, not even a member of the Lawyers' Guild, but the president of the American Bar Association and a corporation lawyer. I believe that was a wise warning. I think you have to go back, in the language used by Professor Fetter, "You have got to reexamine this whole business of corporate activity." Give a man a corporation charter, but do not give him an economic machine gun that he can run wild with. You cannot do that unless the Federal Government does it.

The CHAIRMAN. In other words, let us understand that the corporation is a creature of law, created by some government, and which arises out of a contract between natural persons and the Government, and that it is not endowed with the rights of natural persons but has only those rights which government gives it.

Mr. FLYNN. That is correct and, therefore, the corporation itself constitutes an interference by the Government in natural affairs. It is an interference by the Government, but it is an interference which business likes because they like to have corporations but, therefore, to regulate that thing is not an interference.

Now, if you give a man a corporation charter—

The CHAIRMAN (interposing). There is a good deal of misunderstanding, Mr. Flynn, with respect to what the word "regulation" means. Now, having joined with Senator Borah in the introduction

of a bill to provide a Federal system of franchises or licenses for corporations engaged in interstate commerce,¹ I am very well aware of the fact that a great many corporate executives have the impression that it was our intention to give the Federal Trade Commission, represented here, the power to control the internal affairs and activities of the corporation; whereas, as a matter of fact, that was never the intention of the authors of that bill. It was merely to exercise regulation in the sense which was meant by the framers of the Constitution, of laying down the rules which would be known by the incorporators so that they could manage their own business.

Mr. FLYNN. Well, I hope you succeed in passing that bill, Senator. I am sure you are going to have quite a battle on that bill. You should have introduced it in 1933 when we were very pious.

The CHAIRMAN. I can't afford to let this opportunity slip, of course, to make mention of this and to say that under the concept which Senator Borah and I have had the Federal Trade Commission, or whatever agency which would be charged with the administration of this act, would have no more power to intervene in the internal affairs of such a corporation than the Secretary of State of Delaware has now to interfere in the internal affairs of the innumerable corporations which are created by that State.

Mr. DAVIS. I wish to add, Senator O'Mahoney, that the Federal Trade Commission doesn't want any such authority as a right to interfere in their affairs.

The CHAIRMAN. That is a very welcome statement.

Mr. FLYNN. I have two brief observations. I won't take much more of your time. I hope that bill or some bill embodying that principle will pass. I am sure it will take a long struggle to pass it.

I would like to leave this observation with you: That the necessity for regulation arises when individuals become powerful. You don't have to worry too much about the individual operating with his two bare hands; you have to worry about the fellow when you give him a machine gun. Then you have to make regulations about it; how he will get the machine gun; where he will keep it and how he buys his ammunition, and you will have to have policemen to be sure he abides by these regulations. The man with his bare hands is no problem because the only thing he can use is violence and because there is an ethic against that you will have no difficulty in enforcing that. But the moment you begin to create powerful persons, either by permitting him to combine with others in trade associations or groups, or permitting him to organize himself in a corporation with the resources of other people at his command, then you have on your hand an individual so powerful that the Government has to take note of him and prevent him from using these powerful weapons which you have put in his hands, to the hurt of the community. So the more powerful the individual you create the more necessary becomes the regulations.

The other observation I would like to leave is this. It has to do with the matter of regulation. I personally believe the capitalistic system can be operated successfully only when operated on a functional basis. Let me put it crudely. I don't think you would have to worry much about regulating banks if all banks were run by bankers and nothing but bankers. When a bank is run by a group of real-estate

men or a group of real-estate men and builders who want to use the resources of the bank to put up houses to sell to people, or when it is run by people who have some other idea in their mind than of running a bank and who are in two or three other kinds of business then you have trouble on your hands. But when a bank is run only by just a banker, the only way he can wreck the bank is by openly, obviously criminal activities which you can enforce the law upon. But when a bank and a holding company and a security company and a railroad and a mortgage company and all kinds of companies are united under one holding company and he can move the assets of one around to another corporation and when he can use the funds of the bank legally and properly in all sorts of ways, then you have got trouble on your hands. You can't regulate him; you can't insure good banking; you can't insure that he is running the railroad he is running properly; you can't insure he is running the hotel along with the bank properly.

If you could organize your economic system, I don't mean in a little tiny unit—I am not talking about horse-and-buggy units because we are past that—but if you could organize your economic system with producing and distributing and financing units which are limited to one function and one function only, then you wouldn't have to bother so much about the regulation. It is only when men are permitted to employ the corporate instrumentality you put in their hands, to unite a number of functions in one enterprise, that you have got to protect society against that enterprise. Therefore, I believe that if you are going to regulate capitalistic economy, you have got to do it by dealing with these central glandular functions, credit, profit—profit is good but too much profit is not good—you can regulate that by taxes, all of the various central driving energies of the system have got to be regulated, not the conduct of the people who are running the system; you have got to keep them functioning in health, you have got to keep them functioning abnormally. That kind of control might keep the capitalist system running.

Now, I don't know whether you can do it or not. I have only this feeling of confidence about it, that if you can't do these things the capitalist system is doomed, and it may very well be that the people who are now operating the capitalist system, those who may be properly called the executive capitalists, will never let you do the things that are necessary to make the capitalist system operate. I hope they will let you do it; I hope you will find a way to do it, because I honestly believe—and it fills me with terror—that if the capitalist system breaks down now it will be succeeded by a form of fascism. I think that is the next phase when capitalism in a democracy departs.

The CHAIRMAN. Do any members of the committee desire to ask Mr. Flynn some questions? You have completed your statement?

Mr. FLYNN. I have.

The CHAIRMAN. Mr. Ballinger, what is your plan for tomorrow? You will be ready tomorrow morning at 10 o'clock?

Mr. BALLINGER. Yes, sir.

The CHAIRMAN. I may say that in approaching this study of 7 years of the experience of the Federal Trade Commission, it is my understanding that the Trade Commission has made an effort to advise every corporation or industry which will appear in these proceedings.

Mr. BALLINGER. Yes, sir.

The CHAIRMAN. I have here several matters to be inserted in the record.

Mr. Flynn, may I say before I put these matters in the record and to be inserted in the record immediately after your talk, that the committee feels very much indebted to you for this very admirable presentation. We are very grateful and it is our belief that you have contributed a great deal to the work of the committee by this statement.

Mr. FLYNN. Thank you very much, Senator. It was a great pleasure and honor to come here.

The CHAIRMAN. At one of the earlier hearings Mr. Douglas of the Securities and Exchange Commission addressed some questions to Mr. Alfred Reeves, vice president and general manager of the Automobile Manufacturers' Association, and asked him to prepare a statement of income and expense for the year ended June 30, 1938. This memorandum has now been received by the committee, and without objection I now offer it for inclusion in the printed record.

(The memorandum referred to was marked "Exhibit No. 302" and is included in Hearings, Part II, appendix, p. 802.)

The CHAIRMAN. At the conclusion of the hearing on the glass-container industry, representatives of the industry being present indicated a desire to submit a survey of the industry from the point of view of those who belonged to the industry. It was indicated that such a memorandum would be received. That memorandum is now here and I offer it for printing in the record.

(The memorandum referred to was marked "Exhibit No. 303" and is included in Hearings, Part II, appendix, p. 803.)

The CHAIRMAN. In addition to these two, I have a memorandum received by the committee from Mr. George S. Van Schaick, vice president of the New York Life Insurance Co., a letter addressed to Mr. Gesell of the Securities and Exchange Commission, with reference to "Exhibit No. 263" in the hearings on life insurance before this committee, and this is also offered for printing in the record.

(The letter referred to was marked "Exhibit No. 304" and is included in Hearings, Part IV, appendix, p. 1645.)

The CHAIRMAN. The committee will stand in recess until 10 o'clock tomorrow morning.

(Whereupon, at 5:15 p. m., a recess was taken until Wednesday, March 1, 1939, at 10 a. m.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

WEDNESDAY, MARCH 1, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:15 a. m., pursuant to adjournment on Tuesday, February 28, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senators O'Mahoney (chairman) and King; Representatives Sumners (vice chairman), and Reece; Messrs. Thorp, Davis, Berge, O'Connell, Patterson, Frank and Henderson.

Present also: Federal Trade Commissioners, William A. Ayers and Charles H. March; Willis J. Ballinger, director of studies and economic advisor to Federal Trade Commission; William T. Kelley, chief counsel; Col. William Chantland, PGad B. Morehouse, and Walter Wooden, members of legal staff; Joseph Sheehy, assistant chief examiner; Dr. Francis Walker, chief economist and Col. William England, assistant chief economist, Federal Trade Commission.

The CHAIRMAN. The meeting will please come to order. Mr. Ballinger, are you ready to proceed?

Mr. BALLINGER. Yes, sir. I think Judge Davis is going to make the opening announcement on our program.

The CHAIRMAN. Very good.

Mr. DAVIS. Mr. Chairman and members of the committee: One of the directions the committee gave to the Federal Trade Commission was to report upon the experience of the Federal Trade Commission with respect to restraint of trade and monopolistic matters, and under that direction the Commission has had its staff prepare a synopsis of all of the restraint of trade cases which have been tried by the Commission within the past 7 years, and I wish to now present to the committee Mr. PGad Morehouse, one of the experienced members of the Commission's legal staff who has played a large part in many of these cases and who will present a general summary and outline the character of these cases and what they show, and at the conclusion, in connection with his statement the members of the committee will of course feel free to ask him any questions they desire to with regard to the testimony.

I wish to further state, Mr. Chairman, that we have copies of this presentation which will be furnished to each member of the committee, we trust, by not later than noon. Some of them are undergoing some slight revisions which is delaying the presentation to the committee, but they will all be presented to you in index form so you can readily turn to any particular case or subject or topic.

The CHAIRMAN. I am sure that will be very helpful.

Mr. DAVIS. We hope to have those ready for each member of the committee by noon.

Now, Mr. Morehouse, will you proceed with your statement to the committee?

TESTIMONY OF PGAD B. MOREHOUSE, DIRECTOR OF RADIO AND PERIODICAL DIVISION, FEDERAL TRADE COMMISSION, WASHINGTON, D. C.

Mr. MOREHOUSE. Mr. Chairman and members of the committee: It has been requested that at the outset——

Mr. DAVIS (interposing). I think it was the understanding of the committee that all witnesses, even government officials, should be sworn. Of course we desire to submit ourselves to the rules of the committee.

The CHAIRMAN. Do you solemnly swear the testimony you are about to give in this matter shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. MOREHOUSE. I do.

At the outset it has been requested that I read into the record a brief résumé of the powers and functions of the Federal Trade Commission, and with the committee's permission I will proceed briefly to do so. The Commission was——

The CHAIRMAN (interposing). Before you begin, Mr. Morehouse, would it not be a good plan for you to state to the committee how long you have been associated with the Federal Trade Commission?

Mr. MOREHOUSE. I came with the Federal Trade Commission in March, 1930, where I was assigned to the duty of trial counsel on the Commission's legal staff in the chief counsel's division.

The CHAIRMAN. Where did you get your law?

Mr. MOREHOUSE. In George Washington University.

The CHAIRMAN. How did you enter the employ of the Federal Trade Commission?

Mr. MOREHOUSE. By appointment upon my application, I having practiced law here in the District for some 14 years previously.

The CHAIRMAN. Are you under the Civil Service?

Mr. MOREHOUSE. I am not.

The CHAIRMAN. You are a lawyer outside of the Civil Service?

Mr. MOREHOUSE. Yes, sir.

The CHAIRMAN. But you were appointed in 1930?

Mr. MOREHOUSE. Yes, sir.

The CHAIRMAN. And you have been with the Federal Trade Commission ever since?

Mr. MOREHOUSE. That is correct, Senator.

ORGANIZATION AND FUNCTIONS OF FEDERAL TRADE COMMISSION

Mr. MOREHOUSE. The Commission was organized in March of 1915 under the Federal Trade Commission Act, approved September 26, 1914, which was amended last March 21.

The Commission was organized in March of 1915 under the Federal Trade Commission Act, approved September 26, 1914, which was amended last March 21.

The Commission's functions chiefly are:

To prevent methods of competition and unfair or deceptive acts or practices in interstate and foreign commerce;

To make investigations at the direction of Congress, the President, the Attorney General, or upon its own initiative;

To report facts in regard to alleged violations of the antitrust laws;

To prevent unlawful price and other discriminations in violation of section 2 of the Clayton Act as amended by the Robinson-Patman Act;

To prevent exclusive dealing contracts and illegal capital stock acquisitions, and interlocking directorates in violation of sections 3, 7, and 8 respectively of the Clayton Act;

To administer the Webb-Pomerene or Export Trade Act, aimed at the promotion of foreign trade by permitting the organizations of associations to engage exclusively in export trade and provides that nothing contained in the Sherman Act shall be construed as declaring to be illegal any combinations or "associations" entered into for that sole purpose and actually so engaged under certain safeguarding provisions set out in the law.

In performing these functions the Commission's duties fall into two main categories, namely, legal activity and enforcement of the laws it administers, and second, general investigation of economic conditions in domestic industry and interstate and foreign commerce.

The legal activities, as I have said, have to do with the prevention and correction of unfair methods of competition, unfair and deceptive acts or practices; the administration of section 2 of the Clayton Act as amended by the Robinson Patman Act, dealing with price discriminations, and sections 3, 7, and 8 of the Clayton Act.

In connection with the foreign trade act, the Commission has the power under section 6 (h) of the Federal Trade Commission Act, as amended, to investigate from time to time trade conditions in and with foreign countries where associations, combinations or practices of manufacturers, merchants, or traders, or other conditions, may affect the foreign trade of the United States, and to report to Congress thereon, with such recommendations as it deems advisable.

A more detailed summary of the Commission's administration of the Export Trade Act will be found on pages 125 to 130, inclusive, of the Commission's 1938 annual report, and last June the Commission presented to Congress a Supplemental Report on Antidumping Legislation and Other Import Regulations in the United States and Foreign Countries which brought up to date material in a report on the same subject published in 1934 as Senate Document No. 112, Seventy-third Congress, second session. This work was done under the provisions of section 6 (h) of the Federal Trade Commission Act.

The general investigational work of the Commission and its economic work arises under that same section 6. The powers there conferred are stated to be:

To gather and compile information concerning, and to investigate from time to time, the organization, business, conduct, practices, and management of any corporation engaged in commerce, except banks and common carriers, and its relation to other corporations and to individuals, associations and partnerships.

Second, to require by general or special orders corporations engaged in commerce, except banks and common carriers subject to the act

to regulate commerce * * * to file with the Commission annual or special reports or answers in writing to specific questions furnishing such information as the Commission may require as to the organization, business conduct, practices, management and relation to other corporations.

Under section 6 (c) the Commission, upon its own initiative, is to make investigation whenever a final decree has been entered against any defendant corporation in any suit brought by the United States to prevent and restrain any violation of the antitrust acts. The Commission investigates the manner in which the decree has been or is being carried out. Upon application of the Attorney General the Commission is required to make such investigation. The results are transmitted to the Attorney General with recommendations. The Commission makes the report public in its discretion.

Section 6 (d) provides upon the direction of the President or either House of Congress the Commission shall investigate and report the facts relating to any alleged violations of the antitrust law.

An investigation under this section is undertaken when requested by Congress as a result of a concurrent resolution of both houses in conformity with the pertinent provisions of the United States Code (48 Stat. 291, 15 U. S. C. A., sec. 46a) and the Independent Offices Act of 1934 (Pub. Res. No. 78, 73d Cong.).

Upon the application of the Attorney General the Commission investigates and makes recommendation for the readjustment of the business of any corporation alleged to be violating the antitrust acts, in order that the corporation may thereafter maintain its organization, management, and conduct of business in accordance with law.

To make public from time to time such portions of the information obtained by it hereunder, except trade secrets and names of customers, as it shall deem expedient in the public interest; and make annual and special reports to Congress with recommendations for additional legislation.

From time to time to classify corporations and make rules and regulations for the purpose of carrying out the provisions of this act—that is the Federal Trade Commission Act.

To investigate trade conditions with foreign countries and, as I have already outlined, make such recommendations as it deems advisable.

Referring again briefly to the Wheeler-Lea amendment, I would like to state for the record that outside of amendments, minor in character and largely procedural and clarifying, the principal change made was that that act, in addition to unfair methods of competition, declared unfair or deceptive acts or practices unlawful, and provided that the Commission's cease-and-desist orders should become final within 60 days from date of service unless appealed from by the respondents.

Representative REECE. Would it interrupt you to ask you a question with reference to (1)? To what extent does that give the Commission power, if not direction, to make investigation to determine whether unfair or deceptive practices might be engaged in by some particular business or interest?

Mr. MOREHOUSE. Why, the act itself gives the Commission that power in section 5 where it says: "The Commission is hereby empowered and directed to prevent persons, partnerships, and corporations from engaging in unfair methods of corporation," and, I think,

the power to investigate to see whether they are so engaged in is the direct and necessary inference of that power, and the Commission in all cases either upon its own initiative or after complaint from an outside source does make such an investigation in order to determine whether or not in its opinion it is in the public interest to issue its formal complaint.

Representative REECE. Without any further resolution by Congress specifically authorizing and directing it.

Mr. MOREHOUSE. Exactly.

The CHAIRMAN. What would you say with respect to the specific power granted in section 6 paragraph (a), page 35?

Mr. MOREHOUSE. Well, the Commission has made many of those investigations, hundreds of them.

The CHAIRMAN. That is the answer to Congressman Reece.

Mr. MOREHOUSE. Maybe I misunderstood his inquiry. I thought it was directed at preventing unfair methods of competition.

The CHAIRMAN. He wanted to know about your independent power of investigation.

Mr. MOREHOUSE. Oh, yes; section 6 (a) to (h) really gives the Commission that power.

Mr. DAVIS. I think it is proper to state, however, Mr. Chairman, that the authority vested in the Commission in section 5 of the act and section 6 is somewhat different. The authority in section 6 is authority to conduct certain characters of investigation, particularly relating to monopolistic or restraint matters, whereas in section 5 it deals with all unfair methods of competition or unfair and deceptive acts and practices, which, of course, would include commercial bribery, false advertising, espionage, and various other things which do not ordinarily come under the category of the various restraint matters, monopolistic matters, that are dealt with particularly in section 6, and whereas under section 6 we have authority to conduct those investigations upon our own initiative, in actual practice practically all of our procedure under section 6 has been under direction of Congress or upon request of the President or the Attorney General, because we have, generally speaking, not had sufficient funds to conduct many general investigations upon the Commission's own initiative. Those are what we generally refer to as general investigations.

Mr. MOREHOUSE. I think, Senator, it might also be said that section 6 relates peculiarly and exclusively to corporations, whereas section 5 deals with both personal partnerships and corporations.

The CHAIRMAN. If I remember the history of the development of the Federal Trade Commission Act correctly, section 6 was in contemplation from the very beginning and it was mentioned by President Wilson in his original message as being the desirable power to be granted to the Interstate Trade Commission which he envisioned, to become a sort of agency for gathering and making public facts having to do with interstate commerce, whereas section 5 was inserted after the bill was under consideration in the Congress and was the result largely of an attempt upon the part of the Congress to clothe the Trade Commission with the power to prevent what were deemed to be unfair trade practices. The desire in the beginning, I think, was to try to define clearly just what practices should be forbidden, but Congress was unable to make up its mind exactly as to what those practices should be and compromised by granting this broad power

which resulted in giving a certain amount of discretion to the Trade Commission, which in turn resulted in a number of decisions by the courts which in effect withdrew from the Commission the discretionary power which was apparently intended by Congress.

Mr. Kelley, do I state that right?

Mr. KELLEY. The Senator is correct in that statement. I may sum this up in a word, that section 5 of the Federal Trade Commission Act makes unlawful unfair methods of competition and unfair and deceptive acts. The power conferred on the Commission in section 5 is complete in its authorizing the Commission to investigate and to prosecute and declare unlawful unfair methods of competition and unfair deceptive acts and practices. Section 6 is a sort of conditional power that the Commission shall also have power over corporations engaged in interstate commerce and inquisitorial power to require them to submit reports and special data and to require them to submit pertinent information specified in the act; also it empowers the Commission on request of the President or the Attorney General or the Congress to make an investigation concerning a corporation, but section 5 with respect to unlawful conduct is complete in and of itself, both with respect to investigation and trial and decision.

Senator KING. The language of section 6 is very clear, it is obvious to anyone that it is investigative character to be supplemented by authorized activities.

The CHAIRMAN. Mr. Kelley, perhaps it would be well for me to ask you here how long you have been General Counsel of the Trade Commission.

Mr. KELLEY. I took my law-school work at the University of Wisconsin and the University of Washington in Seattle. I was admitted to the bar in Washington and Oregon, later in the Federal courts, and practiced law in Seattle 5 or 6 years, and in 1914 I came with the Federal Trade Commission as one of its attorneys and have been there ever since. For the last several years I have had the pleasure of serving the Commission as its chief counsel.

The CHAIRMAN. When were you appointed chief counsel?

Mr. KELLEY. December 1914.

The CHAIRMAN. Chief counsel?

Mr. KELLEY. Oh, chief counsel. I guess about 5 years ago. I just don't remember the—

Mr. DAVIS (interposing). It was the latter part of 1934 or the first part of 1935, I would say.

The CHAIRMAN. But you had been with the Trade Commission since 1914.

Mr. KELLEY. Yes.

Mr. DAVIS. Mr. Kelley, how long were you assistant chief counsel prior to being made chief counsel, approximately?

Mr. KELLEY. Oh, I would say approximately 8 years.

The CHAIRMAN. I knew you had been with the Commission for a long time and I thought it well to have it clear in the record, Mr. Kelley.

Mr. PATTERSON. Mr. Morehouse, it isn't quite clear to me, after listening to Congressman Reece, who is a member of the Interstate and Foreign Commerce Committee of the House, why, with section 5 being complete as to unlawful conduct, and section 6 giving additional powers, resolutions are introduced from time to time by Members of

the House for members of the Commission for examinations or investigations of certain subjects before the Federal Trade Commission.

My point is, if section 5 is complete as to unlawful conduct, and section 6 is additional powers, are you going to develop at the proper time what other powers, if any, you need? I hope so. It isn't quite clear to me why the Interstate and Foreign Commerce Committee of the House is called upon so often for assistance.

Mr. MOREHOUSE. Well, Mr. Secretary, I can only say that I don't feel competent to state what motivates a committee of the House or the Senate in exercising the powers given it by law to concurrently adopt a resolution authorizing us to do that. I just know that they do do it, and under section 6 we are directed to follow that resolution and submit that information.

The CHAIRMAN. It isn't so much that a specific resolution by Congress dealing with a particular subject is a new authorization to the Federal Trade Commission as it is that it is a direction or a request by Congress that the Federal Trade Commission should exercise its powers in a particular case.

Mr. MOREHOUSE. Exactly.

The CHAIRMAN. You have the authority under section 6 to use your own initiative, but you might not care to exercise that initiative and Congress, looking over the field, comes to the conclusion that a particular subject ought to be studied, and so it passes a resolution and directs you to go to work on that particular subject, and ordinarily at the same time provides the Federal Trade Commission with the funds with which to carry on the investigation, and without which it would be impossible for you to do it.

Mr. MOREHOUSE. I know we make investigations both ways, on our own initiative—

Mr. DAVIS (interposing). I believe I have in mind what the Secretary has, and I just want to state that as a practical proposition it is necessary for the Commission to be directed by joint congressional resolution before it can obtain the funds with which to make these investigations. The act itself provides that we have the authority to proceed upon our own initiative; it also says that we shall conduct an investigation upon direction of either branch of Congress, but as a matter of fact the Committee on Appropriations of the House has adopted a rule that they will not approve any appropriation unless it is directed by joint resolution.

The CHAIRMAN. I suspect you will agree with me that Congress frequently gives you powers and then doesn't give you money to carry out the powers.

Mr. DAVIS. That is the point exactly. We never get money to conduct those general investigations unless it is either pursuant to the direction of Congress, through joint resolution, or upon an Executive order or request of the President or upon request of the Attorney General in a very few instances, and we don't always get an appropriation under those conditions.

The CHAIRMAN. If I remember correctly the Robinson-Patman Act extended greatly the powers and duties of the Commission, but you have not been able to enforce it particularly well because you haven't had a sufficient appropriation.

Mr. DAVIS. That is true with our work generally, Mr. Chairman. We simply do what we can do with the means we have to do it, and I

wish, if I may, to possibly clear up what Secretary Patterson has in mind with respect to the difference between sections 5 and 6. Section 5, and certain other sections following it, relate to our case procedure. Section 6 relates to the general economic investigations, investigations of a whole subject, a whole industry, as distinguished from a proceeding against an individual corporation or person.

Mr. PATTERSON. My point is, Mr. Chariman, that the F. T. C. has been doing and is doing such a magnificent job that if its powers under sections 6 and 5 are not complete and satisfactory, I would like to have it developed as to what additional powers—maybe not now, a little later—might be suggested to complete the whole and give you what you want.

Mr. MOREHOUSE. I think that will be taken care of later in our presentation, in part by the chief counsel.

The CHAIRMAN. That comes at a later time in this proceeding. At the moment we are covering the review of the 7 years of your experience.

Mr. KELLEY. In that connection, later today I will make some observations on section 7 and section 6 of the Clayton Act. Now, with respect to other shortcomings, or inadequacies of the present antitrust laws to meet monopolistic practices, generally, there will be successively important hearings pertinent to the different aspects and phases of this whole question.

Senator KING. The antitrust law is pretty broad. The terms of the antitrust law, it seems to me, are quite ample to deal with monopolistic practices and conspiracies in restraint of trade.

Mr. O'CONNELL. On section 6 of the Clayton Act I was curious to know whether, under subdivision (b) of section 6, the Commission has power to require reports as to the organization of trade associations.

Mr. MOREHOUSE. Mr. Kelley will probably correct me on that, but I would say not unless they were incorporated.

Mr. O'CONNELL. My impression is that they do. I wasn't sure.

Mr. KELLEY. The powers conferred on the Commission under section 6 are limited to corporations engaged in interstate commerce.

Mr. O'CONNELL. It does not include trade associations even though they are engaged in interstate commerce?

Mr. KELLEY. Not unless it is a corporation.

Mr. MOREHOUSE. Shall I proceed, Senator?

The CHAIRMAN. Yes.

Mr. MOREHOUSE. Getting back to the principal changes made in the Organic Act, I have mentioned that the Commission's orders now become final after a period of 60 days unless appealed from. There is also a civil penalty provided for, for \$5,000 in case of violations after they become final, and certain sections were added which specifically make unlawful the dissemination of false advertising with respect to food, drugs, devices, or cosmetics. The sections making that dissemination unlawful also provide that it is an unfair act or practice to disseminate such false advertising by mail or in commerce by any other means, where the effect is likely to induce the purchase of the commodities advertised, whether that purchase be in interstate commerce or not.

Then if the sale is likely to be induced in interstate commerce, it makes no difference if the advertising were local; either the advertising

or commodity being in commerce is sufficient, if a food, drug, device or cosmetic.

If the use of the commodity advertised is injurious to health when used under the conditions prescribed in the advertisement or under customary or usual conditions, or if there be intent to defraud or mislead, it becomes a misdemeanor punishable by fine or imprisonment, and finally the Commission when it deems advisable in the public interest in such class of cases may apply for and obtain in due course an injunction to prevent the further dissemination of the advertising pending its formal procedure by complaint and the final disposition thereof.

With reference to this report which has been prepared at the request of this honorable committee, and amplifying what Judge Davis has said, this report contains a résumé of the unlawful monopolistic practices and restraint of trade cases which the Commission has had. We go back a little further than 7 years in this report. We go back to July 1, 1930, and we have brought it down, we had to close it about February 1, 1939. During that time of the cases which we have tried, there are presented here in part I of this report a brief digest of 59 such cases. They cover all the cases except the cases arising under section 7 of the Clayton Act and the Robinson-Patman Act. Section 7 cases are taken care of in the second part of this compilation. Each digest and each part of it contains a brief statement of the facts, the commodity involved, and nature and extent of the monopolistic practices, and the effect as found by the Commission upon the evidentiary facts in the report. The description of each case is supported by complete findings as to the facts, conclusion, and order to cease and desist, identified by an appropriate exhibit number. The cases are arranged chronologically and indexed as to companies and commodities. There will also be found therein a list of the pending complaints of the same type in which the Commission has not issued an order. They haven't reached that stage.

Now part II of the report deals with the history of the Commission's reported cases under section 7 of the Clayton Act, which will be presented later by Mr. Kelley. Part II of the report is in two parts. Part 1 deals with the court cases and the second part of part II deals with all investigations that the Commission has made in its efforts to enforce section 7 where those investigations did not result in any formal action for reasons which are stated in the report.

Part III is a comprehensive summary of available economic material in the files of the Commission. That summary in the report which will be submitted to the committee consists of brief outlines covering the origin and the scope of these investigations. A list of these investigations will be found indexed in a table of contents. The report shows the method used in conducting the investigations and gives an indication as to the principal conclusions and recommendations of the Commission, particularly in those instances where legislation has been recommended.

Copies of reports of these investigations have been identified and marked as exhibits, and are fully described in the report.

A discussion will be given of that part of the report later by Mr. Joseph Sheehy of the Commission staff, and some other members of the Commission staff.

Now these fifty-nine cases resulting in cease-and-desist orders since June 1, 1930, cover a wide range of commodities, including alcoholic beverages, automobile-testing devices, butter tubs, building materials, several kinds of clothing, concrete pipe, golf balls, groceries, heavy machine tools, magazines, sponges, turbine generators, glass, snow fence, tin plate, as well as many other commodities which will be found in the index.

While there is naturally a wide variation in the kinds of practices involved, it may be said generally that all of the acts and practices involved in these cases were calculated to and did interfere with the natural play of competitive forces and the effect was an increased concentration of power in the hands of a restricted number of private or limited groups of persons or corporations, the possession of which power either did interfere or had the potentiality of interfering with trade and consequent injury to the public.

More particularly, some of these practices were as follows: Tying contracts; combinations to fix and maintain uniform prices, terms, discounts, and charges; conspiracies to control bids and appraisals; parties combining to submit uniform bids and combining to refuse to bid; conspiracies to prevent sales of competitors' goods; discriminations in price of commodities of the same grade and quality to competing customers; fixing and maintaining uniform delivered prices and guaranties without regard to variety, costs, or true performance; parties in combination refusing to sell; parties in combination refusing to buy; and parties in combination refusing to sell manufacturers who sold mail-order houses enforced by use of so-called white lists; policing bids through clearing houses; zoning, price basing; resale price maintenance; maintaining special lists of preferred customers for the purpose of price discrimination; threats of boycott; conspiracy to divert freight tonnage to shipper's own carrier; enforcement of agreements to fix prices by threats of litigation.

Out of the 59 cases which are completely detailed in the report in brief, we have selected 16 as representative, which if the committee will permit I would like to go into at this time.

MR. PATTERSON. What is the difference between "white lists" and "black lists"?

MR. MOREHOUSE. In essential effect there is no difference. A "white list" as I understand it, Mr. Secretary, is a list of those customers who have been good and have complied with their agreements, whether it be to maintain resale prices or to fix prices or to carry on certain practices. Sometimes they make a list of the good boys and sometimes they make a list of the bad boys. When it is a list of the bad boys it is a "black list" and when it is a list of the good boys it is a "white list."

The particular 16 cases which I wish to take up now deal with the following commodities: Alcoholic beverages; automobile carburetors and carburetor parts; bakery and packaged food products; building materials and building supplies; calcium chloride; canned and dried foods; closure parts for metal containers; corn cribs and silos; draft gears; food—canned sirups and molasses; glass; metal windows; tin plate; turbine generators; water-gate valves, hydrants, and fittings; zinc and copper plates.

REPRESENTATIVE CASES OF MONOPOLISTIC AND RESTRAINT OF TRADE PRACTICES

MR. MOREHOUSE. The first case is that of the *Commission v. Penick & Ford* which was decided in November 1930.

THE CHAIRMAN. How was that case initiated?

MR. MOREHOUSE. That case was initiated by the Commission pursuant to section 5 of the Federal Trade Commission Act and section 3 of the Clayton Act.

THE CHAIRMAN. Did the Commission act of its own initiative or was there some complaint?

MR. MOREHOUSE. There probably was some complaint. If course, the act makes the identity of the complainant confidential, not to be disclosed except upon the authority of the Commission, and while I haven't the files here with me in this particular case, I am sure that the Commission's action was taken upon a complaint, presumably by a competitor.

THE CHAIRMAN. Obviously it would be significant with respect to all of these cases whether the complaint was the result of the initiative of the Commission or the result of the complaint of a competitor, because of course it will be recognized that in all discussion having to do with Federal regulation of any branch of commerce or industry, there is always a very pronounced tendency to criticize Government intervention. When, however, it appears from the records of the Federal Trade Commission that the action of the Commission is taken upon the complaint or at the request of business itself, we present an altogether different picture. Therefore, I think it would be very well for you in the development of your case to indicate whenever you can whether or not the particular hearing was initiated by the Commission or initiated by some business house, person, or corporation.

MR. KELLEY. If it please the committee, I happen to know, I recall distinctly, that that was on a written application from a competing party. I don't recall, but we can supply that information to the committee. I will make this general observation: That the Commission at times of its own motion investigates matters concerning law violations, but very infrequently; usually its matters are investigated on complaint of alleged injured parties. It is a rare case when the Commission makes an investigation that terminates in a proceeding in a violation of law that it is not on application, or applications, as sometimes there are a great many of them, from persons or partnerships or corporations alleged to have been injured.

THE CHAIRMAN. In other words, the Federal Trade Commission doesn't act out of a desire to interfere with business or to meddle in business, but only as a result of the petition of business for protection against alleged violations of law.

MR. KELLEY. That is right, Mr. Chairman.

MR. MOREHOUSE. Mr. Chairman, if I may further answer the question, I believe I am safe in saying that every one of the 59 cases that we have in this report were so initiated after complaint. If, after further investigation, I find out that the statement is not correct, I will see that it is corrected, but that is my impression, my best recollection, that every one of these cases was so started.

The CHAIRMAN. It was my understanding that that was the fact, and I therefore asked these questions to bring it out and to make it clear on the record that the Trade Commission on these cases was acting not on its own will or purpose or desire, but because it was asked to do so by responsible members of the business community.

Mr. MOREHOUSE. That is correct.

Penick & Ford was a Delaware corporation owning and controlling the stock of a sales company of the same name. Certain of the officers and directors of the two companies were the same. The former corporation, the Delaware corporation, packed various canned sirups in plants located in Alabama, Louisiana, Iowa, and Vermont and sold its entire output to the sales company for resale to wholesale and retail groceries. During 1924 to 1927 this was the largest vendor of canned cane sirups in Mississippi, Louisiana, Arkansas, and Texas, and was the only seller in the Southern States that had a complete line of canned cane, corn, and blended sirups and molasses.

The practice they engaged in was entering into a policy they called their 100-percent sales policy, consisting of entering into an agreement with wholesale grocer customers whereby they would deal in its canned sirups and molasses to the exclusion of the merchandise of competitors, in return for certain sales assistance and cooperation which was furnished by the sales company to its wholesale customers who would so agree. This sales assistance was refused or discontinued in the event they sold any competitive product. In furtherance of this sales policy which the Commission found to be in violation of section 3 of the Clayton Act and section 5 of the Federal Trade Commission Act, the sales company in one instance purchased from a wholesale grocer 2,500 cases of a competitive sirup and repacked this sirup and resold it at less than cost.

The Commission found that by that practice the public was deprived of a substantial proportion of the competition previously existing in numerous southern markets by virtue of the closing of outlets of this class of merchandise to competitors, and this had a direct tendency toward monopoly in canned sirups and molasses, and it issued its order to cease and desist.

Now, as an example of the way this report was compiled, there then follows a copy of the Commission's findings and order which is hereby submitted, marked Federal Trade Commission Exhibit 1. That is tied in here and properly marked in the first volume of these exhibits.

The CHAIRMAN. Well, you don't want that printed in the record, do you?

Mr. MOREHOUSE. No; but I thought I would submit the exhibits to the committee for its consideration in case it desired more detail than was in the report, the digest report.

The CHAIRMAN. The exhibits may be received, but they will not be printed.

(The exhibits referred to were marked "Exhibit No. 305" and are on file with the committee.)

Mr. MOREHOUSE. Yes; the same thing would properly apply to all these exhibits which I will discuss.

Mr. DAVIS. In that connection there has been prepared about a dozen volumes of all of the exhibits that are mentioned by the different witnesses, and we wish to file all of them in bound and indexed form,

file all of them for the use of the committee, but unless it is especially indicated, we do not expect them to be printed in the printed record.

The CHAIRMAN. They will be received in that manner.

Senator KING. Was there any appeal to the court from the findings and the decision of the Commission in that case?

Mr. MOREHOUSE. No, Senator. In any case where there has been, I will so state.

Senator KING. If there has been an appeal in any of the cases you are stating, I shall be glad to be advised and particularly if there has been modification of the findings on the decision of the Commission or a reversal of their decision.

Mr. MOREHOUSE. That has been taken care of and is in the written report, and I will mention it verbally. I don't think in any of these cases I am going to discuss there has been an appeal to the court.

The next case is a case of the Waugh Equipment Co. and three individual respondents, decided September 21, 1932. That arose under section 5 of the Federal Trade Commission Act.

Mr. BALLINGER. Would you mind telling the committee whether these corporations are important, whether they are large or whether they are small?

Mr. MOREHOUSE. Certainly, I expect to do so. I have, as I said in Penick & Ford, I told the extent of its activities and the area it controlled, and I expect to do that in each case where the information is available.

The Waugh Equipment Co. was a main corporation and made draft gears. A draft gear is a device for use on railway cars. It is a cushioning or shock-absorbing device that serves two purposes on a car, either freight or passenger. One of the purposes is to provide sufficient free movement or slack to permit the locomotive engineer to take it up, and also to serve as a shock absorber to prevent damage that might otherwise be occasioned by coupling and uncoupling of the cars.

The Waugh Equipment Co. sold this product to railroads in competition with some eight principal competitors, and at the beginning of the time involved in this case it sold less than 1 percent of the total draft gears sold for new freight equipment.

The individual respondents in this case were executive officials of Armour & Co., who together with other officials and certain employees of this large packing concern owned or controlled a majority of the common stock of the Waugh Equipment Co. They were the president and vice president, respectively, of Armour, who in 1924 were given 1,666 shares of the Waugh Co.'s stock as a consideration for them to use their influence with railroad officials in advancing the sale of the corporate respondent's draft gear, and pursuant to such agreement, the respondents succeeded in making substantial sales to some 15 railroads during the period of 1924 to 1929.

The CHAIRMAN. The officers of the packing company were the executive directors of a very large shipping concern.

Mr. MOREHOUSE. Oh, yes. I was just going to bring that out. Armour & Co., of course, as everyone knows, is one of the largest meat-packing concerns in the world and they have in connection with their shipping more than 500 distributing depots, that is, they had at that time, they have more now, or less, I don't know, but then they had 500 in the principal towns and cities of the United States,

and for the purpose of distributing their meats and other products they owned and utilized more than 7,000 refrigerator cars through themselves and their subsidiaries, and in the regular course of their business they had sometimes as much as 275,000 carloads of freight produce to be transported annually. This traffic was highly competitive and the business was eagerly and insistently sought by the railroad companies.

These individual respondents in exchange for their stock so exercised their influence with the railroads by promise of increased patronage or threats of withdrawal of patronage so as to coercively and oppressively, as the Commission found, use that large volume of Armour traffic to secure the sale of the Waugh Co.'s draft gears in preference to draft gears sold by companies who didn't have appreciable traffic to offer as an inducement. So in spite of the fact that this Waugh Co. during those 5 years from August 1924 to August 1929 were selling practically an unknown draft gear in competition with well-established competitors, the proportion of its sales to the total sales of this industry rose from 1 percent in 1924 to 25 percent in 1929 and 35 percent in 1930.

In the findings of the Commission, to make those figures perhaps mean more, if we will compare them with their largest competitor, the largest competitor in round figures in 1924 shows 79,000 sales, Waugh Equipment 2,000; in 1925, the largest comes down from 79,000 to 33,000, Waugh still selling 2,000 and about 800 more. Then the next year the Minor comes down to 28,000, Waugh goes up to 4,000, just about double. The next year the Minor Co. came down to 15,000 and the Waugh up to 7,000, nearly 8,000. In 1928, we found their largest competitor down to 16,000, Waugh was up to 10,000, and finally by 1930 the largest competitor now is selling 8,000 and the Waugh Equipment Co. 17,000, so that they more than doubled their largest competitor in that period of time through the use of this practice.

Senator KING. Were prices reduced? Were the prices of this commodity reduced?

Mr. MOREHOUSE. The findings of the Commission do not go into that, Senator. I can find that out and submit it later. I assume that the prices were reduced comparable as to all competitors, if they were reduced.

Senator KING. Then by reason of the Waugh's activities, prices were reduced. If I understand you, prices of the commodity were reduced.

Mr. MOREHOUSE. No; I didn't intend to so state. Due to these activities the volume of Waugh's sales was increased at the expense of its competitors.

Senator KING. Isn't it true anyway in a competitive system that some rise and some fall? Producers of some commodities increase their sales by legitimate, sometimes by deceptive methods, and that ought to apply to the reduction of the prices. I was wondering here whether or not by reason of this competition the prices of this commodity were reduced.

Mr. MOREHOUSE. That is not in the findings, Senator. I will have to find it.

Senator KING. And do the findings show whether the Waugh device was superior?

Mr. MOREHOUSE. Yes. The Waugh device was not superior. There were two types of draft gears, a spring-plate type and a frictional type, and one was more durable than the other. The spring plate was more durable, I believe, and the frictional type was to be used on passenger cars where they didn't have such heavy loads, and the Westinghouse people had control of the patents on that frictional type for a time, but even after that patent expired the Waugh people continued to sell substantial quantities of the old spring-plate type gear to various railroads for use on passenger cars. They did improve their gear, the findings say, gradually from time to time until in the latter part of 1929 the Waugh was one of the three best draft gears on the market, according to laboratory tests of the American Railway Association, but it had not been in use on railways for sufficient length of time to determine its merits in actual service, and it had been found necessary to make changes and improvements to overcome defects which had been discovered as the gear had been put into use, and as I say it did continue to sell substantial quantities of this old spring-plate type, which it was enabled to do to a certain extent through the use of this threat of withdrawal and promise of traffic of Armour & Co.

The Commission found that the factors that were ordinarily conducive to sales, such as quality, price, and salesmanship, were replaced and overcome by these coercive and oppressive factors used by these respondents in cooperation with one another, to the injury of the public and respondent's competitors, and unduly tended to suppress competition between respondent corporation and competing manufacturers of draft gears, and to create a monopoly in respondent corporation in the sale and distribution of draft gears. Customers were prevented for exercising free will and judgment as to which competitive device was most efficient in serving their needs at the lowest cost over a period of time. There was thus injected, the Commission found, into this competitive field, an unfair, abnormal, and uneconomic element, tending to give the concern controlling the largest volume of freight an unfair competitor advantage, which would more than offset the higher efficiency in the production and sales methods of competing concerns controlling no such traffic. The Commission ordered the respondents to cease and desist from these practices, and a copy of the findings and order are submitted as Commission's exhibit No. 3.

The CHAIRMAN. There was no appeal.

Mr. MOREHOUSE. No appeal. The report of compliance, in accordance with the Commission's usual procedure, was received and filed and presumably they are still complying.

Senator KING. Did the Commission hold that 25 percent of the use of the commodity was a monopoly?

The CHAIRMAN. No; that wasn't it.

Mr. MOREHOUSE. Did they hold what?

Senator KING. Did the Commission hold that a 25 percent use or that 25 percent of the commodity used or furnished by one company was monopolistic?

Mr. MOREHOUSE. No, sir; not at all. The Commission's holding—Senator KING (interposing). They simply condemned the unfair practice.

Mr. MOREHOUSE. They simply condemned the unfair practice as tending toward a monopoly.

The next case involves zinc and copper plates, the Edes Manufacturing Co., a case that arose under section 5 of the Federal Trade Commission Act and was decided in March 1936. There, 11 companies manufacturing more than 90 percent of the zinc and copper plate products in the United States, and which companies were incorporated variously under the laws of Massachusetts, New Jersey, New York, Illinois, California, Indiana, Pennsylvania, and Connecticut, formed a voluntary unincorporated association known as the Photo Engravers Copper, Zinc, and Grinders Association, organized in the city of Pittsburgh. This association——

Senator KING (interposing). Did those organizations produce any of the raw material, for instance the zinc that went into the finished product, or were they merely the purchasers of all the commodities necessary to complete the product which they were putting in the market? I wondered if any of them had the advantage of being a producer of raw material.

Mr. MOREHOUSE. I don't think so.

The findings simply say that they manufactured zinc and copper plates. If the Senator wishes that I would have to go to the more extensive files.

Senator KING. It may be developed later in the discussion.

Mr. MOREHOUSE. This association acted as a clearing house for the exchange of information among the various members as to reports of sales, prices, discounts, and terms, and from time to time the members met, discussed, agreed upon and established certain trade policies to be followed and prices to be charged in the interstate sale and distribution of their products.

The Commission found in this case that the monopolistic practices consisted of these manufacturers entering into agreements among themselves and with the association of which they were the principal members, to maintain uniform prices, terms, and discounts. They met at frequent intervals and exchanged the price information through the association.

Senator KING. Would not this organization in its practices fall within the spirit of if not the letter of the decision of the Supreme Court in the *Hardwood Lumber case*?

Mr. MOREHOUSE. I don't have that case in mind right now, Senator, so I am unable to answer you.

Senator KING. That is where the producers of hardwood lumber met and fixed prices or rather furnished information.

Mr. MOREHOUSE. It falls within or along the same line as several cases that have been decided.

Mr. BERGE. Was there any agreement here to abide by the prices that they fixed?

Mr. MOREHOUSE. The Commission so found.

Mr. BERGE. It wasn't just a case then of exchanging the information but it was a definite agreement.

Mr. MOREHOUSE. The Commission specifically found, based upon the answer of the respondents, that they had entered into an agreement to fix and maintain uniform prices and to cooperate with each other in the enforcement and maintenance of those prices. The exchanging of information was simply one of the incidental means used to accomplish and carry out that agreement.

The effect of this practice, the Commission found——

Mr. Davis (interposing). Is it not a fact that in this case as well as many of these other cases that have been tried by the Commission, the respondent admitted all the charges either in the answer or a stipulation as to the facts?

Mr. MOREHOUSE. That is quite true, and that is why I mentioned the answer in this case. I have a note to call that to the attention of the Committee where that be the fact.

The Commission found that the effect of this practice was to restrict and suppress competition particularly in the prices quoted and the discounts allowed and that that enhanced the prices of zinc and copper engravers' plates above the prices which would prevail under natural, free, and open competition, and that this had a tendency to create a monopoly in these corporate respondents in the manufacture and sale of such products in interstate commerce, and a copy of the findings and order is marked as Commission's exhibit 13 and submitted.

In the case of the American Sheet & Tin Plate Co., decided in June 1936, that was a case that was prosecuted by the Commission pursuant to section 5. The facts were these: The American Sheet & Tin Plate Co. (merged in 1936 into Carnegie-Illinois Steel Corporation) and the Bethlehem Steel Co., the Canton Tin Plate Corporation, the Columbia Steel Co., the Trustees of Follansbee Bros. Co., Granite City Steel Co., Inland Steel Corporation, Jones & Laughlin Steel Corporation, McKeesport Tin Plate Co., Republic Steel Corporation, N. & G. Taylor Co., Washington Tin Plate Co., Weirton Steel Co., the Wheeling Steel Corporation, and the Youngstown Sheet & Tube Co., were severally engaged in the manufacture, among other products, of tin plate which they sold to tin-plate jobbers and manufacturers of tin cans and other metal containers located throughout the United States. The principal purchasers were the American and Continental Can Cos.

The tin plate was in several grades, three specifically mentioned here: production plate, stock plate, and waste-waste. The production plate was a tin plate manufactured according to the customer's specification. The stock plate consisted of seconds or surpluses or warming-up sizes left over from the production plate. The waste-waste was tin plate which contained defects so great as to disqualify it for use as stock plate or seconds.

Before 1935 these respondents had sold a substantial portion of their accumulation of stock plate to tin-plate jobbers who resold it to small can manufacturers and packers who had been unable to carry production plate in stock in various sizes and quantities required.

In the latter part of 1934 these respondents conferred and agreed to cease the production and sale of stock plate after January 1, 1935, and further agreed to require the buyers of production plate to accept

seconds up to 25 percent of their orders. This constituted a combination and conspiracy not to cut prices on stock plate to jobbers and manufacturers which restricted and eliminated competition in the interstate sale and distribution in that particular kind of plate.

After January 1, 1935, these corporations cooperated to carry out the terms of these agreements. They sold some of their accumulations of stock plate as production plate at prices higher than the prices theretofore received for stock plate and cut up some of their stock plate into such shapes and sizes as to make it unfit for use in the manufacture of tin cans or other metal containers so that it was classified as waste-waste.

One defense presented for the consideration of the Commission by these respondents was that in 1933 they had been under the National Recovery Code of Fair Competition for the Iron and Steel Industry and pursuant to that code they had been required to file prices for that industry and refrain from certain unfair trade practices defined in that code.

Many manufacturers, they said, acting in evasion of the provisions of the code, sold as stock plate that plate which was properly classified as production plate, and while apparently selling at the same prices, discriminated in price between different customers, making corrective action within the industry necessary.

The Commission did not consider this to be a good defense and did not consider that it authorized the making and execution of the agreements which I have described.

Senator KING. Is it not a fact that in a number of cases which were initiated by the Commission or were initiated by complaints by competing companies you ran up against the proposition you have just described, namely, they justified their agreements by virtue of the N. R. A. and the codes which had been adopted by the N. R. A.?

Mr. MOREHOUSE. That has been frequently the case, Senator.

Senator KING. So you discovered, did you not, that the N. R. A. had not only initiated but had countenanced and permitted and enforced monopolistic practices.

Mr. MOREHOUSE. With that I don't think we were so much concerned as we were with the fact that subsequent to, after the Schechter decision they continued those practices, which were illegal, and of course such an attempted defense would not be recognized.

Senator KING. You didn't recognize that defense.

Mr. DAVIS. Mr. Chairman, I think it proper to state in this connection that while, of course, the Commission could not recognize those agreements as a defense, yet in the interest of fairness the Commission has never predicated a case upon conduct of any respondent which was done under the terms of an N. R. A. code unless they continued an unlawful conduct subsequent to the Schechter decision. We did not disturb them for conduct under authority of a code prior to the Schechter decision because we did not want to be in the attitude of undertaking to take corrective action against any citizens who had been advised that such course of conduct was legal by Government authority.

The CHAIRMAN. I think that was a very proper course, if I may presume to say so. You may proceed.

Mr. MOREHOUSE. Of course, the Commission found that these practices enhanced the price of stock plate and tended to suppress competition in the sale of tin plate, particularly in that grade. It had a tendency to destroy the business of jobbers of tin plate and create a monopoly in the manufacture of tin containers in the American Can Co. and the Continental Can Co., the principal customers of these concerns, by depriving their small competitors of their normal source of supply of tin plate, and forced smaller manufacturers to buy production plate at prices substantially higher than they formerly paid for stock plate.

A copy of the complete findings as to the facts, conclusion, and order of the Commission requiring the respondents to cease and desist from such practices is marked F. T. C. Exhibit 24. We have already referred to that.

The CHAIRMAN. That is one of the exhibits already referred to in the files of the committee?

Mr. MOREHOUSE. Yes.

The next case deals with a product, turbine generators. That was a section 5 case, decided in April 1937.

RESPONDENT'S RIGHT OF APPEAL UNDER WHEELER-LEA ACT

The CHAIRMAN. With respect to the case you have just discussed and all the others, the findings of the Trade Commission were accepted without appeal?

Mr. MOREHOUSE. Yes, sir; unless I have otherwise stated. In all these cases I can state right now, except the very late ones where the time hasn't yet arrived, reports of compliance have been duly received and filed by the Commission indicating compliance with the provisions of the order. I have, I think, one or two here where the 60-day period allowed for the filing of such report has not expired.

Mr. PATTERSON. You are going to explain in due time rather fully, I hope, all cases that have been appealed, those cases that have reached the Supreme Court, how many cases have gone against you, those cases you have had to take to the Supreme Court and those cases others have taken to the Supreme Court.

I want to know for the record in due time just what happened during the past 7 years as to cases you have lost in the Supreme Court.

The CHAIRMAN. I think that probably will come a little later, Mr. Secretary. It is not within the purview of this testimony.

Mr. MOREHOUSE. It is not within the purview of what I am presenting, Mr. Secretary.

Mr. DAVIS. I can answer the question very briefly, however, by saying that during the past 7 years the Commission has been reversed by the United States Supreme Court in only one case, and that was by a 5 to 4 decision in the *Arrow-Hart & Hegemen* case, which involved section 7 of the Clayton Act.

The CHAIRMAN. Judge Davis, could you tell us offhand what proportion of the cases handled by the Trade Commission are accepted without appeal by the defendants?

Mr. DAVIS. A very large percentage. I don't know whether the exact figures are available.

Mr. MOREHOUSE. We can supply them.¹

Mr. DAVIS. We can assemble those figures and will be glad to do that.¹

Mr. MOREHOUSE. Of course, Senator, you will appreciate that since the passage of the Wheeler-Lea Act, making the Commission's orders final if not appealed from within 60 days, and also making all prior orders final, that resulted in an abnormal amount of appeals.

The CHAIRMAN. It has been my impression that by and large the decisions of the Federal Trade Commission are accepted.

Mr. DAVIS. That is true, notwithstanding the fact that any respondent dissatisfied with the decisions of the Commission has an absolute right of appeal to the Court of Appeals of his own circuit, and then has the same right to present a petition for certiorari to the Supreme Court if the Court of Appeals decides against him. That you have in any case, and in addition to that our statute directs that our appeals shall be speedily heard.

The CHAIRMAN. In other words, the record rather conclusively demonstrates that the Federal Trade Commission has not wantonly intermeddled with the affairs of business.

Mr. KELLY. That is correct, Mr. Chairman. I would say that about—just getting at this to give the figures—not over 5 percent of the cases are appealed, and I may say that of the cases that are appealed, usually they are the weaker ones. They are the ones where the defendants, respondents we call them, think they can induce the Circuit Court of Appeals to reverse the Commission. Generally speaking, the business concerns proceeded against abide by the decisions of the Commission.

The CHAIRMAN. When you say that they are the weaker cases, do you use the word from the point of view of the Commission or of the respondent?

Mr. KELLY. From the point of view of the respondent.

Representative SUMNERS. That is interesting. The cases appealed from are the cases the respondents have the least chance to win?

¹ Commissioner Davis later supplied the following data in accordance with the Chairman's request:

During the period from January 1, 1933, to April 30, 1939, the record of the Federal Trade Commission is as follows:

Total cases investigated and reviewed.....	22,038
Number of stipulations to cease and desist accepted.....	3,379
Number of formal cease and desist orders.....	1,218
Cases decided by the circuit courts of appeals, including all of the circuits, of which 48 were on respondents' petitions for review and 37 on the Commission's petitions for enforcement.....	85
Cases in which Commission was affirmed by circuit courts of appeals.....	81
Cases in which circuit courts of appeals reversed the Commission, but which were carried to the Supreme Court on certiorari, and in which the Supreme Court reversed the circuit courts of appeal and affirmed the Commission.....	
Case in which the circuit court of appeals reversed the Commission, and which was not carried to the Supreme Court.....	1
Case in which the Commission was affirmed by the circuit court of appeals, which was carried to the Supreme Court on petition of respondents, and in which the Supreme Court reversed the Commission and the circuit court of appeals by a 5-to-4 decision.....	1

In addition, since the organization of the Commission there have been 14 cases in the Federal courts involving questions relative to the Commission's procedure in the trial of cases under section 5 of the Federal Trade Commission Act, with the enforcement of which the Commission is charged. These cases related generally to efforts by respondents, through injunction or extraordinary process, to interfere with the normal course of procedure in the trial of cases; in a few instances they related to actions by the Commission to compel the testimony of recalcitrant witnesses. These cases were all decided in favor of the Commission.

In addition, since the organization of the Commission there have been 9 cases in the Federal courts involving questions relative to the Commission's procedure in the administration of section 6 of the Federal Trade Commission Act. This section of the act empowers the Commission to make certain specified general investigations. These cases related generally to efforts by interested corporations, through injunctive or other extraordinary process, to interfere with the procedure by the Commission to secure data deemed necessary to the Commission's investigations, or to compel the production of testimony by recalcitrant witnesses. Five of these cases were decided in favor of the Commission and four decided adversely to the Commission. The latter four cases were decided during the early years of the Commission, at a time when the Commission was undertaking to administer a new act and without legal precedents for its guidance.

Mr. KELLY. No; they have a good chance to win.

Representative SUMNERS. I thought you gentlemen didn't understand each other.

Mr. KELLY. That is perhaps my fault.

Mr. DAVIS. In other words, they are border-line cases, where the evidence is conflicting or not as strong as it is in other cases.

Representative SUMNERS. I can't see any reason for continuing it. It is as clear as it can be.

The CHAIRMAN. They just decided to make it clear in the record. You and I understood it.

Representative SUMNERS. I guess when you and I understand it the general public will. [Laughter.]

One question I don't understand there is the effect upon the number of appeals of the passage of the Wheeler-Lea Act. I am afraid I didn't catch your answer.

Mr. MOREHOUSE. The Wheeler-Lea Act, in making the decisions of the Commission for the first time final upon expiration of a definite period of time, resulted presumably in a considerable number of respondents filing appeals to prevent the order from becoming final who might otherwise not have done so, because prior to that time they could wait 4 or 5 or 6 years before they filed an appeal and would still have that right.

Representative SUMNERS. They would have the right to appeal, but they wouldn't have to comply. Could they file any certificate of supersedeas proceedings which would prevent the going into effect of your order?

Mr. MOREHOUSE. No, sir.

Representative SUMNERS. That is a very interesting result. Do you gentlemen consider it an important result in the administration?

Mr. MOREHOUSE. I think it was only temporal. I don't see anything particularly important about that, except it made a little more work during that particular period of time immediately following the passage of the act.

Representative SUMNERS. They feel that in order to save the chance to appeal they must act quickly, and therefore they act.

Mr. MOREHOUSE. I know there was a comparatively large number of such appeals filed immediately after that act went into effect and before the time limit arrived at by which all the prior orders of the Commission would be final. In some of the cases where there had been orders outstanding for years and years, if they didn't want to abandon forever their right to apply for review, they came in at that particular time.

Mr. FRANK. You think the new statute has had desirable results, then?

Mr. MOREHOUSE. Absolutely.

Mr. BERGE. Prior to the new statute there wasn't any penalty for disobedience of an order unless the Commission applied for enforcement of the order?

Mr. MOREHOUSE. That is correct. The only penalty would be after the Commission's order had been enacted into a decree of a circuit court and there violated, and punishment for contempt.

Mr. BERGE. Doesn't that account, probably, for the increased litigation? Now there are civil penalties if an order is not appealed from within 60 days and then is violated, so that if they question the order

now their only opportunity is to do it within 60 days. Previously, you might say their orders were not self-executing. An order only had teeth in it—I don't want to say it quite that way because the moral force of the order was, of course, the important thing, but a party was immune, you might say, from trouble, until the Commission applied for enforcement prior to the Wheeler-Lea Act. Isn't that so?

Mr. MOREHOUSE. That is correct, and just how much that had to do with any increase in appeals I don't know. I would say it would be a part of and incident to the general proposition that a definite time had been set within which they must apply for review or forever hold their peace.

Mr. DAVIS. Mr. Chairman, I think that our staff will agree with the statement which I make that I do not think there has been any substantial increase in appeals. Right at the time, before the 60-day limit went into effect, there were several appeals, as you explained, because they had to get in under the deadline, and there was an appeal in one case in which the Commission had entered a cease and desist order 14 years before. But for a few who wanted to get in under the deadline, all cases having done so, I do not think there has been any abnormal number of appeals since.

Mr. MOREHOUSE. I did not intend to so intimate. I am just speaking about there being a purely temporal thing at that particular time.

Mr. KELLEY. There were 23 cases, about 23, where the Commission had theretofore issued orders, that sought a review in the circuit court of appeals, but those are being handled. Now I don't think there is any particular inference in the appeal work, but the Commission does have additional work in the Department of Justice. We are instituting a number of civil suits for the recovery of penalties for violation of the order after it has become final, and also a number of criminal proceedings under the food and drug provisions of the act for engaging in advertising that is dangerous to health or with an attempt at fraud, so in that connection we have a great deal of additional work, but I don't think, after we handle those 25 or so cases that appealed, after those are disposed of, I don't think there will be any particular increase in the appeal work, review of the Commission's orders by the court.

Representative SUMNERS. Mr. Chairman, I would like to withdraw the question. [Laughter.]

The CHAIRMAN. The suggestion of the vice chairman is that we proceed.

Mr. MOREHOUSE. The case involving turbine generators, decided in 1937, arose under section 5 of the Federal Trade Commission Act. Parties were the General Electric Co., Westinghouse Electric & Manufacturing Co., Allis-Chalmers Manufacturing Co., and Elliott Co. They manufactured and sold turbine generators, principally to different governments, municipal, State and Federal. Combined, they were so influential as to influence and control the trade in all such products. Before 1933 they were in competition with each other, both as to efficiency and performance guarantees and initial cost, all of which were vital factors in making the sales of these generators.

The Commission found that they got together and agreed to fix and maintain uniform delivered prices and performance guarantees for turbine generators. They adopted and adhered to, as their own,

the delivered pricing sheets and confidential performance data compiled by one of them, without giving any consideration to their respective costs or to the true theoretical or actual performance of their turbine generators.

The Commission found that this monopolized this business unreasonably, restrained, stifled, and suppressed competition in the industry, depriving the public of price, service, and other advantages which would otherwise have accrued.

A copy of the findings and the conclusions and the Commission's order to cease and desist is among the miscellaneous exhibits herewith submitted.

At the same time the Commission issued its findings and order against all of the corporations I have named except the General Electric Co., who were engaged in the manufacture and sale of condensers, as well as the turbine generators, and who had combined with each other to accomplish the same objectives in the same manner with reference to their condensers as they all had with reference to their turbine generators.

That finding and order is included in "Exhibit No. 305," already introduced.

Representative SUMNERS. Before you go to the next case, may I ask you, in your practice do you have any formal conferences at any time with any of these people whom you think possibly are violating the rules and regulations of law that don't go into your regular order?

Mr. MOREHOUSE. When a case is being investigated, upon complaint of a member of the public or a competitor, it is the rule, I believe, for the examining attorney to call upon the party against whom the complaint has been directed and obtain the advantage of hearing anything he may wish to say, any data he may submit, and call upon any other person that the proposed prospective respondent might suggest, the idea being to get all the facts. Is that what you mean?

Representative SUMNERS. No, sir; it isn't. I was wondering if in your practice you sometimes are able to adjust conditions, straighten out conditions, without going to the point of a formal hearing or procedure.

Mr. MOREHOUSE. We do that quite frequently except in cases that involve violations of antitrust laws. The general line of policy, as I understand it, and Mr. Kelley will correct me if I am wrong, has been not to enter into stipulations—

Mr. KELLEY (interposing). No; that isn't quite correct. Mr. Congressman, frequently we hold conferences with industry and we are glad to whenever they request it, and if the Commission makes an investigation and determines that there is a violation of law, frequently counsel for the companies, sometimes representatives of the companies themselves, come down for conferences. Sometimes they will last most of a week, and frequently terminate by the companies filing an answer admitting the facts that the Commission alleged in the complaint to be true, and terminating the case without trial.

Representative SUMNERS. I understand. That wasn't the question. My question is: Do you confer with management prior to filing of complaint?

Mr. KELLEY. Frequently, Mr. Congressman, but when we have evidence that they have violated certain practices like fixing prices, or that there was a deliberate intent to defraud, we don't compromise those cases.

Representative SUMNERS. I understand that.

Mr. KELLEY. But in all other character of cases they come in. They are terminated without even a complaint.

Representative SUMNERS. Now that is what I was asking for.

Senator KING. Where there is no mala fide in the conduct of those against whom complaint is made, you oftentimes compose the differences and not follow them.

Mr. KELLEY. Yes.

Mr. DAVIS. As a matter of fact a very large percentage of our cases, I would estimate not less than 85 percent, are settled by respondents, signing stipulations in which they admit the essential facts which constitute a violation of the statute and agree to cease and desist from those respective practices. At least an overwhelming percent of our cases are settled that way.

Senator KING. But if in those negotiations and investigations you reach the conclusion that no law has been violated, then there is no complaint filed and no cease and desist order entered and no agreement entered into between the complainant and the Government and the respondents.

Mr. DAVIS. That is true, and as a matter of fact, Senator, the Commission investigates and closes a great many more cases than it takes corrective action in, because if after an investigation by its staff it appears that there is not a violation of law over which it has jurisdiction, it is closed without any publicity or release or anything of the kind.

Representative SUMNERS. That answers my question.

Mr. MOREHOUSE. Shall I proceed, Mr. Chairman?

Mr. DAVIS. Yes; proceed, Mr. Morehouse.

REPRESENTATIVE CASES OF MONOPOLISTIC AND RESTRAINT OF TRADE PRACTICES ¹

Mr. MOREHOUSE. The next case involves water gate valves, hydrants and fittings. Approximately 31 corporations who were engaged in the business of manufacturing those and similar products, and in the sale of such products to towns, cities and municipalities and State and Federal Governments, comprised substantially all of the manufacturers of such products used for water supply systems, and before December 1933, these 31 were in competition with each other as to price.

They were incorporated and had their principal offices and places of business in some 17 different States, and were members of what was known as the Water Valve and Hydrant Group of the Valve and Fittings Institute, a New York corporation. From December 1933 until January 1935, this industry operated under the code authority pursuant to the National Industrial Recovery Act, and some of the respondents named in this case were administrative officers of that authority.

¹ This subject is resumed from p. 1725 et seq.

The monopolistic practices in this case consisted of agreements by and between these 31 corporations to fix and maintain prices. The Commission found they so agreed and did fix and maintain enhanced uniform delivered prices for their products. They divided the United States into zones, fixing uniform discounts to distributors and requiring the distributors to maintain uniform minimum resale prices, and by intimidation and persuasion certain of the respondents induced others of them to raise prices to the prices agreed upon.

By uniform delivered prices the various members were prevented from allowing differences in the proximity of any given customer to their respective manufacturing plants to result in any difference in the amount to be paid as the delivered price.

The Commission found that this uniform delivered price system results in discrimination in price between the various customers after making due allowance for the cost of transportation, exacting higher prices from customers having little or no transportation expense and lower prices from those having heavy transportation expense. That is to say, customers located in or near the place of manufacture and shipment are deprived of the economic advantages of their location, and are required to contribute to the cost of transportation to more distant customers. The Commission found that these acts and practices had a dangerous tendency, that they had actually hindered price competition in the sale and resale of these products, and had created in the respondent members of this group a monopoly unreasonably and unlawfully restraining interstate commerce.

A copy of the findings and order of the Commission in that case are marked F. T. C. Exhibit 49 and is included in "Exhibit No. 305," already introduced.

The next case is commonly referred to as the Cal-Pack case and involves the California Packing Corporation, the Alaska Packers Association and several individuals. It was decided in 1937. It arose under section 5 of the Federal Trade Commission Act.

The California Packing Corporation was organized in California in 1916. It packed and distributed food products such as dried and canned foods, canned vegetables and fish, pineapples, and coffee. It was one of the largest packers and distributors of such products in the world, and an important factor in the Hawaiian pineapple industry and the packing of sardines and tuna fish since 1936. It had more than 100 canning factories, located over 10 States and Alaska and Hawaii, and sold some of the products under such brand names as "Del Monte," "Sunkist," "Goldbar," and so forth.

The Alaska Packers Association, another California corporation, engaged exclusively in the packing of salmon and the sale thereof, with nine canning factories located in Alaska and one on Puget Sound. Eighty-four percent of its stock was owned by the former company, the California Packing Corporation.

In the course of their respective businesses, these two companies purchased substantial quantities of raw materials and manufactured products, such as containers and cartons, tin, steel, copper, paint, and other articles from the manufacturers thereof throughout the United States, and both in the sales of their products and their purchases of materials they were in competition with other manufacturers and producers and purchasers using the same instrumentalities of

distribution and transportation as these respondents, including various ports, docks, wharves, and terminals located in San Francisco Bay and tributary waters.

Encinal Terminals was a public wharfinger corporation in the city of Alameda, on the east side of San Francisco Bay, and leased the land upon which its facilities were located from the Alaska Packers Association. It was organized by these two corporations who since 1925 utilized its facilities in the distribution of their product.

San Francisco Bay, upon which the cities of San Francisco, Oakland, and Alameda are located, is a land-locked harbor, 48 miles long, with 100 miles of shore line, and for many years has been recognized as the principal harbor for steamships on the Pacific Coast, and ranks second only to New York Harbor in the United States as to the number of steamship lines landing their cargoes at docks and wharves there. Approximately 166 steamship lines carry freight to and from those three ports which are under the immediate control of the board of State harbor commissioners and are operated on a nonprofit basis. Five other terminal companies were there engaged in the public wharfinger business competitively with each other and with the Encinal Terminals. The function of each was to act as a connecting link from railroad to ocean carriers and vice versa, acting as the agents for both exporters and in-bound steamers.

The practices which the Commission found to have a monopolistic tendency in this case were as follows: By promises that these corporate respondents would buy or increase their volume of purchases from the suppliers of their raw and manufactured materials, and by threats of reduction or discontinuance in the purchase of such materials, they coerced and compelled a substantial number of the sellers to divert substantial quantities of freight tonnage which normally and usually would have been routed through the competitive terminals located on San Francisco Bay to their owned and controlled Encinal Terminals Co.

By the same means they also coerced the routing through their terminal of shipments by steamship companies, although the services and facilities of the competitive terminals were equal to those of the Encinal Terminals, and in many instances, more economical to the said steamship companies and shippers. Incidental to this program, the respondents coerced and compelled a number of steamship companies to disclose the identity of consignees of freight shipments and to allow confidential records and manifests to be inspected so as to enable the respondents to bring pressure and influence to bear upon the said consignees to divert traffic to their own terminals. They did this acting concertedly and in cooperation with the individual respondent officers named, and spied upon the business of their competitors for the same purpose.

Of course, the effect was that the distribution expenses of the California Packing Co. and the Alaska Packers Association were reduced and their revenues increased to the unfair advantage of their competitors who had been compelled, against their interest, to route their products through the Encinal Terminals.

There was one port there way inland, I think on the San Joaquin River—is it Stockton?—where it was possible for an exporter to ship his goods by rail (it was maybe 160 miles inland), and of course the freight by shipping by boat came less than by rail. They could save

in many cases \$1 a ton, I believe the Commission found, if they weren't required by these coercive practices to ship it by rail to the east side of San Francisco Bay to this Encinal Terminals Co., owned and controlled by these two respondents.

This naturally caused the competitors to have to pay more for their raw materials and manufactured products and gave the respondents an unfair competitive advantage over all their competitors who did not control large freight tonnage and who did not engage in such coercive practices. The usual and normal competitive considerations of quality, service, and price were thus displaced by respondent. The Commission found that this tended to create a monopoly in them in the sale and distribution of the food products which I have described.

A copy of this finding and order is included in "Exhibit No. 305" already introduced.

The next case involves metal windows and was a matter of the Metal Window Institute. In this case the findings were upon the answer of the respondents. It arose under section 5 and was decided in November 1937. Nineteen corporations constituting substantially all of the manufacturers and distributors of steel window products in the United States, and who had been in active and substantial competition with each other, became members of the Metal Window Institute, which was a voluntary unincorporated trade association. The products manufactured and sold by these respondents and firms were principally used in the construction of industrial and commercial buildings, and generally sold through competitive bids. A substantial part of their sales for several years had been to the United States, to the several States, as well as to municipalities or political subdivisions of municipalities for use in the construction of public buildings.

Before the association was formed, certain of the members had compiled and afterward through the association revised and computed their sales prices by the application of discounts according to a formula to gross or basic prices published in a so-called basic price book. This was a comprehensive and detailed list of prices for all of the products of the metal window industry.

Acting through this association, the 19 firms established and maintained clearing bureaus to assist each other in checking estimates for bids for metal window products from plans and specifications. In connection with this method they entered into agreements in furtherance of which they combined to establish and maintain uniform prices, terms, and conditions of sales and schedules of discounts from these basic prices. In any given geographic area the members would submit all estimates of bids to be made on a project located there to one of the clearing bureaus in that geographical area theretofore designated by the association to clear bids or prices for that particular area, and identical gross, and in some cases identical net, price estimates were agreed upon and used in submitting bids on these projects.

The association required all its members to adhere to and abide by the established prices and actively policed the industry and threatened to impose penalties on those who sold for less than the established prices.

One way in which the nonmember competitors were prevented from becoming successful bidders on projects and induced to join the asso-

ciation was the agreement by members that in certain cases the bidding should be open, and in those cases the members would concertedly underbid the nonmember, the nonmember competitors: sometimes by concerted action the members were able to secure the withdrawal or cancelation of bids where the bids were less than the prices which they had established by mutual agreement.

The Commission found that this was an unlawful restraint of trade on metal window products, that it increased prices, maintained prices at artificial levels, and deprived the public of benefits which it would otherwise have obtained had free and open competition been permitted to exist among these 19 competitors.

The Commission's order in the case is included in "Exhibit No. 305", already introduced.

The CHAIRMAN. That was a case which rather clearly illustrated the practice whereby the members of that association were preventing new competitors to enter the field in which they were engaged.

Mr. MOREHOUSE. Absolutely; it was impossible—nearly impossible.

The CHAIRMAN. In other words, it was the establishment of the closed door, to use the phrase which has come into common practice, with respect to China; we talk of the open door in China, the necessity of maintaining free, open access to the trade of a great country. Here was an illustration of a practice, the purpose of which was to close the door except to certain favored individuals, and it was being done by those individuals or those corporations themselves in their own association. Is that a correct statement?

Mr. MOREHOUSE. Exactly, Senator. I think it also illustrates the idea that monopoly does not have to exist in one person. Nineteen competitors can still be nominally competitors and separate organizations and still have a monopoly.

The CHAIRMAN. In other words, it was a combination to maintain prices and to exclude all but the members of the association from the opportunity to participate in the particular business.

Mr. MOREHOUSE. Yes, sir.

Mr. FRANK. For educational purposes might it be desirable to get in the record the notion that the economists have invented the word "oligopoly," to describe what you are describing.

Mr. MOREHOUSE. I never heard the word before, but I think it is a good word.

Mr. FRANK. As I understand it, "monopoly" means one seller and "duopoly" means two, and the economists, as I said, have invented the word "oligopoly" to describe several sellers who, so to speak, have a joint or shared monopoly. Also someone invented the word "monopsyny" to indicate one buyer having a strategic position giving him advantages equivalent to that of one seller. There should, I suggest, be another word, "oligopsyny" to describe several buyers who together have such a strategic position.

The CHAIRMAN. I am inclined to think that is an unfair competitive practice so far as the understanding of economics is concerned. It is designed on the part of the economist to exclude the common people like myself from understanding what we are talking about.

Mr. FRANK. As I understand it, Mr. Chairman, that is frequently the function of economists. They vie with lawyers in that respect.

The CHAIRMAN. Using language to conceal thought.

Mr. O'CONNELL. In these cases that you are discussing, what penalty, if any, is imposed on the group who have so combined as indicated in that case to suppress competition?

Mr. MOREHOUSE. I don't know if the findings detail that penalty or not. If you will give me just a moment I will see. It was a threat, I believe I said; a threat of imposition. I don't know that any were imposed.

Mr. KELLEY. The only penalty is the order; but after 60 days the order becomes final and in case of a violation after it becomes final then they become liable for a civil penalty, recoverable in a civil suit by the United States.

Mr. O'CONNELL. I wanted to be sure that I understood. For a continued practice such as this the penalty up to the point of a cease-and-desist order is merely the order to cease and desist from the practice, and it is only for a continuation of the practice that any additional penalty is given. In other words, it is a technique which merely tells a person violating the law merely to stop violating the law.

Mr. KELLEY. That is right.

Mr. MOREHOUSE. I thought you were asking what penalty these members would impose on somebody for violating their rules.

The CHAIRMAN. Mr. Morehouse, I wonder how much more time you will need.

Mr. MOREHOUSE. I have six or seven more cases, most of them very brief. I should say that if there are not too many inquiries, I might be able to finish in a half an hour to thirty-five minutes.

The CHAIRMAN. I discussed the plan for the afternoon with Senator King before he was called away. That buzzer that you just heard, of course, was the roll call in the Senate, and it may be that there will be some voting in the Senate this afternoon, so it is my purpose at the termination of this particular testimony to suggest a recess until tomorrow morning at 10 o'clock, so we would have the afternoon free. Now we might stay here until you conclude, if that is agreeable to the committee.

Mr. DAVIS. Mr. Chairman, we will be very glad to conform to the convenience of you and the other members of the committee. We are ready to go right on, or we can stop whenever occasion requires, and Mr. Morehouse is to be followed by the chief counsel with particular reference to section 7 cases, and other phases of historical review of our work.

The CHAIRMAN. My understanding was that it would probably take about a day and a half to cover the testimony of Mr. Morehouse and Mr. Kelley, and I was planning to go through tomorrow without interruption all day. I always dislike to hurry a witness or to seem to cut off the opportunity for questions. Now whatever is the desire of the Federal Trade Commission, I shall be very glad to follow. Shall we proceed and conclude Mr. Morehouse's testimony and then recess until tomorrow morning, or should we recess now and allow Mr. Morehouse to take it up again in the morning?

Mr. MOREHOUSE. It is a matter of no concern to me.

Mr. DAVIS. It is immaterial to us. Whatever the other members of the committee prefer is all right with us.

(The members of the committee conferred.)

The CHAIRMAN. If there is no objection, it being 5 minutes after 12, the committee will stand in recess until tomorrow morning at 10 o'clock, and Mr. Morehouse will resume his testimony at that time.

(Whereupon, at 12:05 noon a recess was taken until Thursday, March 2, 1939, at 10 a. m.)

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INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

THURSDAY, MARCH 2, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:35 a. m., pursuant to adjournment on Wednesday, March 1, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senators O'Mahoney (chairman) and King; Representatives Sumners (vice chairman), Reece and Williams; Messrs. Thorp, Davis, Berge, Frank, O'Connell, Henderson, and J. B. Wyckoff, representing Department of Commerce.

Present also: Federal Trade Commissioners William A. Ayres and Charles H. March; Willis J. Ballinger, director of studies and economic advisor to Federal Trade Commission; William T. Kelley, Chief Counsel and Joseph E. Sheehy, Assistant Chief Examiner, Federal Trade Commission.

The CHAIRMAN. The committee will please come to order.

Mr. Ballinger, are you ready to proceed?

Mr. BALLINGER. I think Mr. Morehouse is still on the stand. He has a few concluding remarks to make.

TESTIMONY OF PGAD B. MOREHOUSE, DIRECTOR, RADIO AND PERIODICAL DIVISION, FEDERAL TRADE COMMISSION, WASHINGTON, D. C.—Resumed

REPRESENTATIVE CASES OF MONOPOLISTIC AND RESTRAINT OF TRADE PRACTICES ¹

Mr. MOREHOUSE. Mr. Chairman and members of the committee. The next case which I have to discuss is the case of the Pittsburgh Plate Glass Co., which arose both under section 5 of the Federal Trade Commission Act and section 2 of the Clayton Act, 2 (a) and 2 (f). The facts in that case were these:

The Pittsburgh Plate Glass Co. manufactured and sold window glass and other glass products. It had 8 factories. They were located in the States of Pennsylvania, Indiana, Missouri, Ohio, West Virginia, and Oklahoma. They also had 70 warehouses located in many different States from which they distributed their products. This company and 7 competing glass manufacturers comprised the membership in an association known as the Window Glass Manufacturers' Association.

¹ This subject is resumed from p. 1738 et seq.

The National Glass Distributors' Association was composed of distributors of window glass and like products. The 7 manufacturers whom I have mentioned and one more were associate members in this distributors' association; the Pittsburgh Plate Glass Co., however, held membership in the distributors' association for some 38 of its 70 distributing establishments.

Except for the monopolistic practices which I will briefly detail, the members of each group would have been in competition with the other members of the same group, or other members of their class, and also in competition with other manufacturers and distributors. The manufacturers who constituted the membership in the manufacturers' association owned and controlled practically all of the factories producing window glass in the United States, and the distributors group was also so large and influential as to be able, and it did, control prices, terms and conditions upon which these products were sold throughout the United States.

About 1935 these manufacturing and distributing firms combined and conspired to enforce by coercive means observance of certain policies and sales methods by distributors who were either not permitted to be or did not desire to become members of the association.

Some of these policies and practices may be briefly described as follows:

First, all buyers were classified as either quantity buyers or carload lot buyers, and lists so classifying them were printed and circulated.

Next, each of the manufacturers published only one window glass price list showing the prices for quantity buyers exclusively.

The distributors' association published price lists for carload lot buyers exclusively and only their members could distribute them.

All who were not classified as quantity buyers had to buy glass from or through quantity buyers.

All buyers except quantity buyers had to pay up to 7½ percent more for window glass of the same grade and quality than the price quoted to and paid by the quantity buyers.

The sales of quantity buyers were confined to a restricted area apportioned to the authorized quantity buyers who either never or very rarely accepted orders for window glass to be transmitted to the manufacturer from dealers located outside of that particular area.

Two or more dealers were precluded from making pooled purchases in carload lots to get the benefit of the discount accruing to that classification. Carload-lot buyers might not reconsign or divert the shipment to any other dealer.

Distribution and outlets for the product were otherwise generally controlled.

Quantity buyers were arbitrarily defined as those buyers purchasing from 3,000 to 5,000 50-foot boxes of window glass for stock each year. The manufacturers issued price lists for window glass to carload lot buyers and refused to sell carload lots directly to any buyers except approved quantity buyers and sought and obtained the assurances of cooperation from one another in making these practices, policies, and pricing activities effective.

I might state also that in some instances where the manufacturer sold to a nonquantity buyer he shipped the glass direct to the customer but took 2½-percent increase for himself and a 5-percent increase for

the quantity buyer in that area, whether it came through the quantity buyer or not.

The Commission found in its findings which were entered in October of 1937 that all these practices tended to place control over the channels of distribution in the particular manufacturers and distributors who had so combined. The practices, the Commission found also, concentrated and limited in these quantity buyers the opportunity to buy window glass from the manufacturers at the manufacturers' discount price; standardized prices and favored certain purchasers through unlawful discrimination in prices to the unfair competitive disadvantage of others; and unreasonably restrained, stifled, and suppressed competition in the window glass industry. In turn this tended to and did increase the cost to purchasers of such window glass, discriminated against small business enterprises, and obstructed the establishment of new window glass distributing concerns, and otherwise interfered with the ordinary flow of trade in the general commerce of window glass, to the injury of all dealers, distributors, and others who refused to conform to this program as laid down by these two groups. Competition was substantially lessened and a monopoly in the sale and distribution of window glass promoted. Real competition between manufacturers and their competitors was prevented.

A copy of the Commission's findings, its conclusion, and order, is among the exhibits to which I have already referred, as No. 59.

Senator KING. If I properly interpret your statement, it would seem that the manufacturers were probably not cooperating with the distributors or some of the other intermediaries through which the products passed to the ultimate consumer.

Mr. MOREHOUSE. The manufacturers possibly were more sinned against than sinning, but because they cooperated in the general set-up they were made parties and subjected to the same order.

Senator KING. This organization would seem to have been promoted by or at any rate officered by very largely the distributors and the intermediate organizations between the manufacturer and the ultimate consumer.

Mr. MOREHOUSE. The findings are not clear on that subject. I assume from the set-up that the distributors received as much advantage if not more than the manufacturers from the set-up.

The CHAIRMAN. But you say in the testimony that seven manufacturers were members of this national distributors' association.

Mr. MOREHOUSE. They were associate members, so-called, and the officers—

Senator KING (interposing). Did the evidence tend to show that they imposed their wishes upon the organization of which they were associate members or that the distributors and these other organizations which had to do with the dissemination of the products dominated the organization and determined its policies?

Mr. MOREHOUSE. It is not stated in the findings, Senator, as to which group dominated; it simply states that together they combined and conspired to bring about these ends. The officers of the Window Glass Manufacturers' Association were individually made respondents along with the directors and members of that association, also the officers of the distributors' association, which officers in each case were different.

Senator KING. Has the Commission followed up the decision to determine whether or not it effectively prevented the further consummation of the conspiracy to monopolize the industry?

Mr. MOREHOUSE. The records show that a satisfactory report of compliance was received and filed, and while I have no present information, I assume that it is being complied with, either that or at present being investigated.

The CHAIRMAN. Investigated by whom?

Mr. MOREHOUSE. By the Federal Trade Commission.

The CHAIRMAN. Does the Trade Commission follow up these certificates of compliance to see whether or not they are being carried out?

Mr. MOREHOUSE. Yes, sir; to a large extent. Of course, we are somewhat dependent upon the other members of the industry who have been affected by these practices. Generally when practices of this sort are continued after an order of the Commission to cease and desist, we have no trouble hearing about it, and immediately of course look into it.

Senator KING. The persons who initiated the proceedings are the ones who would look after the enforcement of the findings of the Commission?

Mr. MOREHOUSE. Usually, sir.

The CHAIRMAN. Of course there have always been two points of view expressed with respect to the manner in which the principles of the antitrust laws should be upheld. There has always been one group which has contended that there should be active government policing; that is to say, it is the group which during the past generation have been urging that there should be some sort of a Board or Commission which would, in the words of Woodrow Wilson, be empowered to make terms with monopoly. Another group has always felt that that would be unwise and that the function of government is rather to act as a judge when individuals or corporations, members of an industry, make their complaint about unfair trade practices or violations of the antitrust laws, and that progress should be made by judgment in individual cases, the results being left to determination by the general public later on as to whether or not the practices have been abandoned.

Mr. MOREHOUSE. I think, Senator, that the latter is the general way in which the Commission operates. It has been my observation since I have been there that when we issue a "cease and desist" order and receive what purports to be in good faith a statement that the respondent has been and is complying with that order, it has never been my experience that we go out, we might say, snooping, to see whether that is so or not. We accept his statement or the statement of his counsel until it is called to our attention that it is wrong, in some way which necessitates further action. Does that answer your question?

Mr. BERGE. May I ask, these certificates of compliance, or whatever the form of evidence of compliance is that you speak of, that comes from the respondent itself?

Mr. MOREHOUSE. In some cases from the respondent or from his accredited attorney of record. At present I think they require the respondent himself to sign the report.

Mr. BERGE. I suppose that as a usual thing when your order requires abandonment of some practice, the company will have to set up some substitute procedures to take the place of the methods abandoned, and I was wondering whether your certificate of compliance had to state what they were doing in place of the abandoned practice.

Mr. MOREHOUSE. This report of compliance takes no particular form. It is comprised of a statement showing the manner and form in which the respondent is complying, and if he makes a full statement that will show up what you have suggested, and if he does not make a full statement we call on him for further information.

Mr. BERGE. Are those certificates ever in the form generally of merely a blanket certification, "We are complying with your order"?

Mr. MOREHOUSE. I have never seen one of that simple nature received and filed by the Commission. Generally in a case like that I would say there would always be further ascertainment of just what was the manner and form in which he claimed he was complying.

Senator KING. Like a decree of the court in an injunction proceeding and the person or persons against whom the injunction is issued—although the injunction may define several acts which he is forbidden to do or restrained from doing, if the court finds he has complied with the terms of the injunction it isn't necessary he should set out in detail what the terms are when the injunction itself states what the terms are, so I assume when your findings and decree indicate just what practices are unfair, and an order to cease and desist those respective practices states what those practices are, if the defendant, the respondent or his counsel states that they will comply with those things, you assume that that will be done, and if not, complaint will be made and the necessary steps supplemental in character will be taken in order to assure compliance with the decree.

Mr. MOREHOUSE. That is correct. A certificate will sometimes take this form. The respondent will say since being served with the Commission's order to cease and desist he has done none of the acts or things therein prohibited and expects not ever again so to do, and that is sometimes sufficient.

Mr. O'CONNELL. Mr. Morehouse, may I ask a question on that same line. You are probably familiar with the cease-and-desist order in the *Pittsburgh Plus* case, involving the United States Steel Corporation in 1924.

Mr. MOREHOUSE. I am sorry, I am not familiar with it because that was before my time with the Commission, and I have never—

Mr. O'CONNELL (interposing). There have been some recent developments in connection with that case. I can bring you up to date. As I understand, in 1924 a cease-and-desist order was entered which provided among other things that the steel companies were directed to cease-and-desist from selling steel on any other basis than f. o. b. points of shipment of the steel, and I take it when the steel companies signed the statement in which it was stated they have determined to conform to the provisions of the cease-and-desist order, that is the equivalent of what you refer to as a certificate of compliance.

Mr. MOREHOUSE. That is the equivalent of what I refer to, no doubt, but if you wish to know more about what happened in that case, I would appreciate it if you would let me refer you to the Chief Counsel.

Mr. O'CONNELL. Possibly Mr. Kelley can answer that.

Mr. KELLEY. That isn't just the case in that particular case. That particular case you mentioned is an exception. Perhaps that will be more or less brought out in the hearing in a few days in connection with steel.¹ I will say this, that after the enactment of the Wheeler-Lea Act making the orders of the Commission final if not appealed from within 60 days, the United States Steel Co. felt that they couldn't let that order in the *Pittsburgh Plus* case become final.

They filed a petition to review the case in the circuit court of appeals in Philadelphia.

There has been a good deal of water under the dam since the Commission issued its order in that case and the Commission is trying now—it has just about completed its case against all of the cement companies involving fundamentally this question of identical delivered prices and basing point systems. In view of that case, involving facts brought up to date, which undoubtedly, I think, will reach the higher courts, I entered into a stipulation with Mr. Bye, of the United States Steel Corporation, approved by the Commission, asking the circuit court to suspend hearings of that *Pittsburgh Plus* case for a year, thinking in the meantime that there will be a decision by the Commission in the cement case and perhaps a decision by the court. If they don't reach that in that time we intend asking the circuit court of appeals to postpone it.

Mr. O'CONNELL. I hadn't intended asking anything that might be developed later by the Federal Trade Commission. We were discussing the effect of a cease-and-desist order and a certificate of compliance by some respondents directed to do something. I would just as soon reserve it until a little later if we are going to talk about steel.

Mr. KELLEY. If the Commission issues an order, say in a false advertising case, and it finds a certain representation is false, it requires them to quit that representation. Of course a report in that kind of case is a simple matter. However, when we come to requiring them to show the manner in detail, and just how they have complied with a complex order involving conspiracy or combination in restraint of trade, we take particular care in that kind of case to have a sufficient report to see that the order has been complied with, and that the future conduct will not transgress the order. If we think it does, we call it to their attention, and sometimes we have conferences with respect to those reports. It depends upon the character of the order that the Commission issued.

The CHAIRMAN. You may proceed, Mr. Morehouse.

Mr. MOREHOUSE. Thank you.

In 1937 the Commission issued findings and order against the Building Material Dealers Alliance, which was organized in 1931 as an unincorporated trade association with a membership of over 150 dealers in building materials and builders' supplies who were all located in what was known as the Pittsburgh-Cleveland trade area. The materials which they dealt in included cement, brick, tile, clay products, sewer pipe, plaster, sand, gravel, stone, lime, lumber, lath, roofing, and other materials ordinarily used in the construction industry. The trade area described consisted of a portion of Ohio and Pennsylvania

¹ See testimony on the basing point system as practiced in the steel industry, beginning *infra*, p. 1861.

and was one of the largest markets in the country for the sale of such supplies.

This alliance was managed by a board of councilors who were representative of the dealer members. For the more effective operation of the alliance, the membership was divided into local associations or subdivisions.

The Pittsburgh Builders Supply Club, another respondent, was an association of the largest business firms in this industry in Pittsburgh, Pa., who sold over 75 percent of the builders' supplies in that area.

Dealers operating in the trade area around Cleveland banded together in an unincorporated trade association known as the Building Material Institute. These dealers, with few exceptions, were also members of the alliance.

Dealers in the western half of Pennsylvania and the adjacent trade area, which territory was part of the Pittsburgh-Cleveland trade area, formed the Western Pennsylvania Builders Supply Alliance. This alliance was affiliated with and actively cooperated with the other associations in carrying out their joint programs and policies. Its members were also members of the alliance.

The Allied Construction Industries of Cleveland, Inc., was an Ohio corporation. Its membership consisted of firms engaged in various lines related to the building and construction industry, including certain building materials and builders' supply dealers in and about Cleveland. Five of these dealers were members of the alliance.

Then there was the Lime and Cement Exchange of Baltimore. That was an incorporated association, and an affiliated unit of the National Federation of Builders Supply Associations.

The Middle Atlantic Council of Builders Supply Associations was a trade association with eight builders' supply associations engaged in the same industry.

The Maryland Builders Supply Association comprised dealers in builders' supplies from that part of the State of Maryland lying west of the Chesapeake Bay and west and south of the Susquehanna River. It was a unit of the Middle Atlantic Council and the National Federation.

The National Federation of Builders Supply Associations was incorporated in 1933 under the New Jersey laws and it comprised certain associations of dealers engaged in the several States and federated together for the purpose of promoting their common business interests. It consisted of 41 federated units located in approximately 32 States throughout the United States.

The members of these organizations and associations whom I have mentioned bought their supplies from manufacturers and producers located throughout the United States and sold and shipped them in interstate commerce, in the course of which but for the combinations and other conspiracies they would have been in competition with each other and with other firms engaged in this industry.

The practices and policies which they engaged in may be described as follows: They classified their members and other approved concerns as recognized dealers. This classification theoretically depended upon whether the dealer seeking recognition could establish some reasonable justification for the existence of his business in the community which he served, or proposed to serve, but in fact and actually

it depended upon an arbitrary decision of the officers and members of the associations and who were competitors and prospective competitors of the dealer who desired recognition.

The main objective of the program in which all of these associations and their members actively cooperated was to control and confine retail distribution in building materials and supplies to such recognized dealers and to prevent the direct sale by manufacturers to all others, including consumers, nonrecognized dealers, contractors, State governments, and other political subdivisions; and to force all purchases and flow of commerce in such materials to come through the recognized dealer channels of distribution upon the terms and conditions of sale which would afford them a satisfactory profit, which they fixed.

A further objective was to limit the distribution of such supplies to carload quantities by rail, eliminating motortruck distribution so as to prevent competitors from obtaining truckload quantities. Another objective was to prevent other than recognized dealers from participating in pool car shipments; to prevent certain manufacturers from purchasing raw materials direct from other manufacturers and to facilitate price fixing among the recognized dealers in their respective communities, and also to eliminate brokers.

To these ends they procured written agreements from each member, from manufacturers and from producers, to support their program. By circulating statements of policy and threats of boycott against those who refused to cooperate these agreements were enforced. Insistent pressure was exerted by dealers upon manufacturers and producers to cooperate.

Price lists were furnished dealer members in some communities for their guidance. If a dealer failed to observe such prices, the organizations brought pressure on manufacturers who sold to the offending dealer to refuse to make any further sales to him.

At the last meeting of the Building Material Dealers Alliance, held on January 3, 1933 (that is the last one before these findings were written), the National Federation of Builders Supply Associations was formed to apply on a national scale the foregoing principles and policies. In 1936 the National Federation issued what they called a "call to arms" to five hundred or more dealers throughout the United States who had always sold more than one-half of all hard material distributed through dealer channels in this country. Various commodities committees were formed such as a committee on cement, clay products, metal lath, lime, and so forth. These various committees formulated certain recommendations. For instance, some of the recommendations of the cement committee which the Federation adopted were: That manufacturers should not ship to dealers outside the prescribed dealer territory; that the organized units, with their dealer members, should determine what that territory was to be; that cement manufacturers stop all warehouse operations; that all trucking of cement be stopped; that a minimum differential of 15 cents per barrel on sales of portland cement in carload quantities should be maintained; that the federated units should make revised lists of established dealers to be furnished to all cement manufacturers shipping into their territory.

Now in 1935 the United States, through the Procurement Division for the Relief Administration, had tried to buy direct from manufacturers and sent to Ohio manufacturers an invitation for bids on 100,000

barrels of cement. As a result of prompt action on the part of the Ohio Builders' Supply Association, which I have heretofore described, as an affiliated unit of the National Federation, no cement company would quote prices. When the same invitation was mailed to manufacturers outside of Ohio, again no direct bids were made. The National Federation in this way succeeded in having the United States Government change its policy of direct purchases of materials for relief purposes, and a form letter was sent to the various units of the federation referring to the last-described activity, which I have just detailed, as "one of the finest pieces of cooperative work that this industry ever engaged in, bucking a department of the Government."

The Commission found that interstate commerce in the sale and distribution of building materials was thus restrained by eliminating so-called irregular dealers and manufacturers and producers selling to such dealers, and restricted and confined to such manufacturers and producers and dealers as would conform to these plans of combination of the different associations and their members. Competition in the sale of all building materials was substantially lessened and suppressed. Competitors of members were unable to obtain interstate shipments of their requirements due to the combined will of the associations and their members. Manufacturers were injured in their business and in their freedom to sell their products direct to purchasers as they pleased; they dared not sell to many to whom they wished and considered as dealers, and would not sell to consumers, contractors, the Government or its political subdivisions. Truck transportation was interfered with, and the small purchaser injured by being prevented from obtaining supplies in that way. Costs to the consuming public were increased and the public denied the advantages in price which it would otherwise have obtained had not these practices been cooperatively carried on and the agreements of the various associations adhered to.

The CHAIRMAN. I suppose the contention is always made in cases of this kind that unless these practices were followed and competition were absolutely wide open, the result would be what has been called cutthroat competition, which in turn is said to bring about a condition under which none of the manufacturers or distributors cooperate at a profit, swinging to the other side. Do they not justify the practices which they followed upon the ground that it is necessary to establish such practices in order to stay in business?

Mr. MOREHOUSE. Senator, while I did not try this case, I have tried cases somewhat similar where that contention was advanced, and it no doubt was in this case.

The CHAIRMAN. Has the Federal Trade Commission in any cases in which you participated given weight to these contentions?

Mr. MOREHOUSE. None whatever.

The CHAIRMAN. What has been the view—what has been your view with respect to it?

Mr. MOREHOUSE. That would seem to involve a personal opinion with respect perhaps to the Miller-Tydings law, and that is the law which deals with the so-called cut-price or throat-cutting competition, and I am going to take that up, if I may, in the very next case that I discuss.

Senator KING. I want to ask one question. This case did not come under your supervision, as I understand it.

Mr. MOREHOUSE. That is correct, Senator.

Senator KING. Do you know whether the Commission considered the facts sufficient to warrant proceedings under the antitrust laws by the Department of Justice? It seemed in the résumé which you have presented that there was such a conspiracy to restrain trade or to monopolize trade to have warranted criminal proceedings under the antitrust laws.

Mr. MOREHOUSE. Senator, please, that is a matter of policy with which I had nothing to do and I would prefer either for Judge Davis or the Chief Counsel to answer that.

Senator KING. I am not making any criticism of the proceedings. I was just wondering whether or not the Commission probably would have the authority to remit that question to the Department of Justice.

Mr. DAVIS. Senator, if I may be permitted, it very frequently occurs that the Federal Trade Commission does refer matters to the Department of Justice and makes our files available to them where we feel that there is an indication of the violation of the Sherman Act, either as to which the Commission does not have jurisdiction or where the Commission feels that it is a matter that can be better handled, more effectively handled, by the Department of Justice through the Sherman Act. Invariably, I think I might say, under at least the present policy of the Commission, if an investigation is made that involves possible monopolistic practices in interstate commerce and if the Commission thinks it is of a nature that the Commission itself could not undertake further, I think it is practically an invariable practice to bring it to the attention of the Department of Justice for such action as they may deem proper to take under their jurisdiction.

Senator KING. I assume from what you have stated, Judge Davis, that there is cooperation between the Department of Justice and the Federal Trade Commission so that in investigations which it makes, if it finds there have been transgressions of the Sherman antitrust law, those facts are brought to the attention of the Department of Justice.

Mr. DAVIS. Yes, sir; that is the general practice, and, on the other hand, from time to time the Department of Justice will bring to our attention, just like other departments of the Government do, matters which they think would come peculiarly within our jurisdiction, and in that respect there has been entire harmony between the Commission and the Department of Justice.

Senator KING. I would like to ask a question, if I may. Were those various organizations in the States and Districts organized with any capital, or was it just a loose association without capital, but under articles of incorporation or association?

Mr. MOREHOUSE. The findings are silent upon that. I believe the attorney—Mr. Kelley, do you know that?

Mr. KELLEY. I do not.

Senator KING. I will not press the matter. Just one other question.

Mr. MOREHOUSE. I imagine they were in the nature of either voluntary trade associations or some of them are incorporated, as the findings show. I don't think that any of them were engaged in business.

Senator KING. So far as the record shows, were the manufacturers the moving spirit in effecting the organizations, the combinations, to which you have referred as the subject of investigation by the Federal Trade Commission?

Mr. MOREHOUSE. The findings, I don't believe, Senator, show again who was the moving spirit. It deals with each group on a par as having, group by group and individual by individual, actively cooperated together in doing these things.

Senator KING. What I have in mind is, were the manufacturers coercing the distributors or purchasers or whether the distributors and purchasers, retailers, or wholesalers, coerced the manufacturers into participation in this wholesale or broad national organization.

Mr. MOREHOUSE. Well, the picture as I get it from the findings, Senator, is that after these things get started they coerce each other.

Mr. O'CONNELL. I didn't understand that Senator King's question as to whether this particular case was ever referred to the Department of Justice for prosecution under the Sherman Act had been answered. Do you happen to know?

Mr. MOREHOUSE. Judge Davis, I believe, just answered.

Mr. O'CONNELL. What was the answer?

Mr. MOREHOUSE. This case was not referred to the Department of Justice.

Mr. DAVIS. For the reason that the Commission itself took corrective action. In addition to monopolistic practices there were various unfair trade practices involved in this industry, in the opinion of the Commission, and it felt that by cease and desist order it could meet the situation, and as far as we know did. We have reason to believe that it did.

The CHAIRMAN. In other words, this was another one of the cases in which no appeal was taken from the cease and desist order of the Commission.

Mr. DAVIS. That is correct.

The CHAIRMAN. And the Commission felt that having achieved the objective, having obtained an abandonment of the condemned practices, it was not necessary to pursue a criminal remedy also.

Mr. DAVIS. Yes; and right in that connection, if any of them against whom the order had been directed violated the cease and desist order, then the Commission might and doubtless would present the facts to the Department of Justice to proceed against them under the criminal statute, but up to to date we have received no information of violation of the order.

Mr. O'CONNELL. In a proper case is there any reason why if the conduct was sufficiently objectionable, the Federal Trade Commission could not enter a cease and desist order which would be as to prospective conduct, and at the same time have the Department of Justice proceed under the Sherman Act for the conduct which you have already directed the cease and desist order toward.

Mr. DAVIS. While that technically is possible, it practically is a rather difficult situation. I think it is generally felt that perhaps one remedy is sufficient unless it proves ineffective. They are not supposed to want to impose corrective action and penalties upon violators under different acts, different agencies, except where it has proved to be necessary. It is just a question of psychology, a question of resistance to double effort, you might say.

Mr. O'CONNELL. As I understood Mr. Morehouse's résumé of that particular situation it seemed to me that that particular conduct was very reprehensible and that it might be that in that case, and in

some other cases, the mere direction not to do it again probably would not be adequate to meet the situation.

Mr. DAVIS. Of course that is true, and yet this particular case involved hundreds of businessmen who generally speaking were good citizens, who stood well in their communities and if you undertook to go into all the different communities in which they were affected and prosecute them criminally I imagine you would have considerable difficulty as well as the delay and expense and other matters incident, and besides, just as was suggested by Mr. Morehouse, it is like a snowball, it is one of those things that the more it goes the more it grows. This man will do this and another one that and another that, and of course there is a portion on one side and a portion on the other, and they fall into those practices, many of them justifying their own conscience by way of a defensive proposition, so I personally, for whatever my opinion may be worth in the light of my experience, would say that in many instances, generally speaking, a cease and desist order, which is in effect a permanent injunction, is quite as effective as sporadic criminal prosecution, especially when, as we know from experience in matters of this kind, the fines imposed by the courts generally do not amount to a farthing so far as corporations are concerned.

The CHAIRMAN. As a matter of fact Judge Davis, it would be possible for the Department of Justice, or for any United States attorney, to take up any one of these cases, irrespective of the recommendations of the Federal Trade Commission, if it desired or he desired.

Mr. DAVIS. Oh, sure.

Mr. KELLEY. Mr. Chairman, in that connection and in answering Mr. O'Connell, the order to cease and desist of the Federal Trade Commission is not simply a command to quit. The law provides that after an order has become final, and it becomes final in 60 days unless it is appealed from. [Reading:]

Any person, partnership, or corporation who violates an order of the Commission to cease and desist after it has become final * * * shall forfeit and pay to the United States a civil penalty of not more than \$5,000 for each violation, which shall accrue to the United States and may be recovered in a civil action brought by the United States.

Mr. O'CONNELL. I was only raising a question as to whether the prospective nature of the cease and desist order was always adequate in the situation. I was merely raising the question as to whether this technique, which is purely prospective, was adequate, and whether or not there was any point in considering a punishment for past offenses.

The CHAIRMAN. It seems to me it might be appropriate to remark that this colloquy rather illustrates the desire and the practice of the Federal Trade Commission as a Government agency to cooperate with business by not making the corrective activity too severe upon individuals who may have been acting in good faith in some instances.

Mr. DAVIS. In other words, the Federal Trade Commission has no authority to impose any penalties or forfeitures, no fines, no imprisonment or anything of the kind, and we are glad we don't. The Commission is not advocating that authority and we don't want it.

Now, all that we can say is, when we, upon investigation and upon trial and fair hearing, decide that certain members of the industry are violating the law over which we have jurisdiction in this respect

and that respect and other respects, to say, "Stop!" "Stop!" That is the purpose of it, and in these trade matters they generally do not pertain to criminal matters in the ordinary acceptance of that term. It wasn't contemplated that the Federal Trade Commission should have criminal jurisdiction or partake of it. It is corrective action, it is preventive action, and it has proven successful in a remarkably large percentage of the cases. Relatively speaking, the Federal Trade Commission orders are seldom violated, and the same is true, equally so, with respect to stipulations to cease and desist which, as I before explained, constitute perhaps 85 percent of our cases. They observe those stipulations in an overwhelming percentage of the cases, stopping the practices involved and making unnecessary any further action on the part of any branch of the Government.

Senator KING. Let's proceed.

Mr. MOREHOUSE. Sometime in the latter part of 1937 the Commission issued its formal complaint against the five largest distillers of liquor in the United States, which were Seagram, Gooderham & Worts, the Schenley Distillers organization, Hiram Walker, and the National Distillers Products Corporation.¹

These complaints were issued simultaneously and were substantially the same in that they charged each of these large distilling groups with the maintenance of minimum resale prices contrary to section 5 of the Federal Trade Commission Act.

A little background of these distilling corporations might be in order. The Seagram Distillers Corporation was one of the four largest distributors of alcoholic liquors in the United States. It sold wherever liquor was lawful in an annual total dollar volume of about \$70,000,000. It had sales offices in New York, Illinois, California, Louisiana, Michigan, Pennsylvania, and Massachusetts, and employed a large number of salesmen to solicit the trade of wholesalers, retailers, hotels, bars, and restaurants all over the United States. It did a very substantial amount of national advertising. It made direct sales of all its products to carefully chosen distributors who in turn sold to the package stores, retailers, and bars. From time to time it put out price lists upon which were scheduled suggested prices at which its liquors should be sold by the wholesale distributor, and by the retailer, all the prices from the manufactured price down to the last consumer price. These prices varied for different States. The liquors were sold to wholesalers upon the definite understanding and agreement that the wholesaler would observe the suggested minimum prices and would sell only to retailers who likewise observed them.

Gooderham & Worts was a Delaware corporation, affiliated with a Canadian corporation of the same name. It sold alcoholic beverages, some of which were manufactured and sold to it by the Canadian corporation, and the balance of which it purchased from Hiram Walker. It had four large sales distribution centers: New York, Illinois, Colorado, and California, and with regard to the maintenance of minimum resale prices it conducted its business in substantially the same manner as Seagram.

Schenley, also a Delaware corporation, owned all the stock of many subsidiary distilleries, including some in Pennsylvania and Maryland. It also owned Schenley Products Co., its sales corporation. Together

¹ See hearings on the liquor industry, Hearings, Part VI.

with its owned and controlled subsidiaries, it constituted one of the largest units for the distilling and distribution of alcoholic liquors in the United States. In 1935 its gross sales exceeded \$63,000,000. It has sales offices in some 10 or 12 States and did a large amount of periodical and newspaper advertising. It followed the same practices as the other distillers.

Hiram Walker, also a Delaware corporation, was one of the largest. It had around 200 salesmen, did a large amount of national advertising, selected its distributors very carefully who sold in turn to package stores, retailers, and bars. It prepared the same kind of suggested price lists.

National Distillers Products Corporation was a Virginia corporation, manufacturing in its own name and through wholly owned and controlled subsidiary distilleries, including those formerly operated by the American Medicinal Spirits Corporation, Penn-Maryland Corporation, A. Overholt & Co., Inc., the Old Taylor and Old Crow Distilleries near Frankfort, Ky., and many others.

It was one of the largest distillers in the United States, had divisional sales offices in several States and employed a very large number of salesmen, traveling throughout the United States, calling on wholesalers, retailers, hotels, chain stores, including the Great Atlantic & Pacific Tea Co., Liggett's Drug Stores, Whelan Drug Stores, and others, and it also of course did a large amount of national advertising.

In connection with the sale and distribution of their respective lines of products, these distillers in order to stabilize and make uniform the resale prices established and maintained what is known as the Beechnut system of merchandising, whereby they fixed specified standard and uniform resale prices, discounts, and mark-ups at which their said products should be sold all the way down the line to the consumer, and they received and accepted the active support and cooperation of the wholesalers and retail dealers in the maintenance of this system.

In pursuance of this plan, each of these distillers had agreements or understandings with their wholesale distributors. These agreements provided that the distributors would sell only to the retailer who would agree to resell at the suggested minimum prices.

The distributors also agreed to sell the distillers' products at a uniform fixed price to retailers and without any discounts from the suggested list prices.

The distillers agreed to cooperate by furnishing so-called missionary men—that is the trade name for them, I understand; these missionary men would travel around to these various territories and act as sort of policemen as well as salesmen—and other designated representatives in securing and furnishing all necessary information for the purpose of enforcing the suggested prices.

The distillers agreed to drop from their list of distributors any who were found offering to make or making a discount from their suggested list prices.

The distributors agreed to stop supplying retailers who cut prices and to compile and maintain reports or lists, namely blacklists, of those retailers who failed or refused to maintain the suggested minimum resale prices, and not to reinstate them until such reinstatement had been authorized by the distillers.

The CHAIRMAN. And this was all the work of the whisky mission.

Mr. MOREHOUSE. Whisky missionaries.

The distributors agreed to dismiss salesmen who offered or gave discounts or who divided their commission with retailers.

The distributors agreed to furnish the distillers with the names of wholesalers who offered or were suspected of offering discounts to retailers, and the distillers in turn would supply the distributors with the same information and lists.

Employees of the distillers were instructed to report any violations of the above agreements and the distillers received and acted upon these reports to the end that the supply of products on hand with offending retail liquor dealers and distributors should be exhausted. They cut off the supplies of all price-cutting retailers and reinstated offending price-cutters who agreed to behave. On their part, the retail dealer vendees handling these respective lines agreed with the distributors and with the distillers' representatives that the retail dealer's profit should be made uniform by fixing and maintaining minimum prices for liquor, and only such retail dealers who promised to maintain uniform resale prices should be supplied.

They also agreed that wholesalers should be notified not to supply any price-cutting retailers.

All of these foregoing agreements were carried out so far as possible by the concerted and cooperative action of the parties named as respondents in these cases.

The Commission found that the direct effects making these agreements were to suppress competition and to cause them to sell at prices suggested rather than at such lower prices as they themselves might deem adequate and warranted by the respective selling costs and competitive conditions in their particular territory.

The Commission proceeded, as I said before, against each of these five distinct concerns in five separate complaints which were based on extensive interviews and investigations of hundreds of prospective witnesses located throughout the New England and Atlantic seaboard areas.

On August 17, 1937, the Miller-Tydings Act was passed, as title VIII of an act to provide additional revenue for the District of Columbia. As the committee knows, this act amended section 1 of the Sherman Antitrust Act and section 5 of the Federal Trade Commission Act so as to permit contracts and agreements for resale price maintenance such as were involved in the instant cases in all States or Territories where such contracts had been made lawful as applied to intrastate transactions under any statute, law, or public policy then or thereafter in effect in such State or Territory.

At the time of the passage of the Miller-Tydings Act there were about 42 States which had enacted fair-trade laws; all except Texas, Missouri, Vermont, Alabama, and Delaware and the District of Columbia. Since then I believe Mississippi has enacted one. There are 43 now I know. Yes, Mississippi. This left minimum resale contracts affecting commerce going into the District of Columbia and those States as the only such contracts which the Commission considered that its jurisdiction any longer applied.

It appeared from our investigational files that except for the distillers' acts and practices occurring in connection with liquors shipped for resale into the District of Columbia all the acts and practices I have mentioned occurred in these so-called fair-trade States, one of the 43 States. The Commission, therefore, limited its findings of fact and

orders to the acts and practices of these distillers in connection with the liquor sold in the District of Columbia so that presumably, in the absence of any restraint except as to liquors sold in the District of Columbia or shipped for resale therein, these 5 distilling enterprises are by the Miller-Tydings Act enabled to and do continue by agreement to control the resale prices of their products elsewhere throughout the United States.

In the *Beech-Nut case* (257 U. S. 441) a system of merchandising similar to that used by these distillers was held by the Supreme Court to suppress and prevent freedom of competition in violation of the declaration of public policy embraced in the Sherman Act, and to constitute an unfair method of competition in violation of the Federal Trade Commission Act.

In the case of *Old Dearborn Distributing Company v. Seagram Distillers*, decided December 7, 1936, by the Supreme Court, it was held that the Fair Trade Act of Illinois, which except for minor differences not important here, was the same as the fair-trade laws of the other States, was not unconstitutional and that prices in respect to identified or branded goods could be fixed under legislative leave by contract between the parties.

In this latter decision the Supreme Court referred to bills introduced in Congress from time to time authorizing standardization of price agreements in respect of identified goods upon which bills extensive hearings had been held by congressional committees. These bills were in all essential respects like the Illinois act. Exhaustive legal briefs, testimony, and arguments for and against the economic value of the proposed laws were described in the records of these hearings. Those were the hearings before the Interstate and Foreign Commerce Committee, House of Representatives, H. R. 13305 (63d Cong., 2d and 3d sess.), H. R. 13568 (64th Cong., 1st and 2d sess.), and report of Federal Trade Commission on Resale Price Maintenance (70th Cong., 2d sess.), House Document No. 546.

The CHAIRMAN. What was the gist of the Federal Trade Commission's report, not in this case but in the particular report that you have just cited?

Mr. MOREHOUSE. I am going to describe it in just a few moments. I don't know if it will answer, but if it doesn't answer, I can't answer it. I have the report here and it is submitted in one of these documents.

Copies of the Commission's complaints in these cases and its findings and orders so far as the District of Columbia is concerned are submitted with these exhibits.

With the exception of Seagram Distillers Corporation, the Commission's findings in each of these cases were based upon answers filed by the distillers in which they admitted the acts and practices insofar as they related to liquors sold in or shipped for resale in the District of Columbia. In the *Seagram case* the Commission had set the case down for trial and a complete copy of the transcript of testimony, together with photostatic copies of certain exhibits are contained among the exhibits here offered.

A copy of the Commission's Report on Resale Price Maintenance, to which the chairman just referred and which was referred to by the court in its decision in the case of *Dearborn v. Seagram*, is submitted. This document comprises a report on the general economic and legal

aspects of resale price maintenance and was undertaken on the initiative of the Commission. It covers information received in reply to questionnaires sent to manufacturers, wholesalers, retailers, and consumers, together with a discussion of the legal status of resale price maintenance in the United States and certain foreign countries. It was transmitted to the Speaker of the House of Representatives in two parts on January 30, 1939. Part II dealt with the commercial aspects and tendencies, and summarized the results of the inquiry undertaken by the Commission, based upon statistical information furnished by manufacturers, wholesalers and retailers, and supplemented by direct oral inquiries made by agents of the Commission.

It is my impression—I would like to be corrected if I am wrong—that there weren't any recommendations.

The CHAIRMAN. Can you answer that, Mr. Kelley?

Mr. KELLEY. I think perhaps Dr. Walker,¹ who is here, can answer it better than I can. My recollection is that there was no specific recommendation, but I recall the Commission in its report and conclusions made some very pertinent statements.

Dr. WALKER. I wasn't paying attention. I didn't hear the question.

The CHAIRMAN. The question was what, if any, recommendation the Federal Trade Commission made in its report on resale price maintenance, which was made to the Congress on January 30, 1939.

Dr. WALKER. The general tenor of the Commission's report was to oppose legislation in favor of resale prices.

The CHAIRMAN. In other words, the Commission found that the economic effect of resale price maintenance and contracts was bad?

Dr. WALKER. They found the balance of public interest, as I understood the conclusion, was in favor of leaving persons free to resell at their own prices.

The CHAIRMAN. Thank you, Dr. Walker.

Mr. MOREHOUSE. If I may supplement that, Mr. Chairman, the concluding comments of the Commission, after its report at the end of the second volume, will be found commencing on page 162 of Commission's Exhibit 74-B. It is rather long, a page and a half or two. I don't know that you would desire to have it read into the record.

The CHAIRMAN. I suggest that it be incorporated in the record at this point without reading.

Mr. MOREHOUSE. Very well. I suggest that it be so incorporated, and offer it.

The CHAIRMAN. If there is no objection on the part of any member of the committee, it will be so offered. Will you be good enough to see that it is copied?

(The document referred to was marked "Exhibit No. 306" and is included in the appendix on p. 2170.)

Mr. MOREHOUSE. We also have submitted here among these exhibits, in addition to these copies of findings, conclusions, and cease-and-desist orders in these five cases, which I explained only affected the District of Columbia by reason of the Miller-Tydings Act, copy of the transcript of the testimony taken in the *Seagram* case, and I wish to call special attention to that record, pages 312 to 329, and pages 356 to 364, 542 to 550, and 599 to 618 for testimony relating to press

¹ Dr. Francis Walker, Chief Economist, Federal Trade Commission.

cooperation with distillers' resale price maintenance policies. There is also in the record at pages 1196 to 1253 and 1289 to 1330, and 1348 to 1357, specific testimony as to specific instances showing the operation and effect of the distillers' policy upon the wholesale and retail trade.

There will also be found among the Commission's exhibits in the trial of that case, Exhibits Nos. 1 to 4 and 5 to 125, sample reports made by these missionary men that they would make daily showing instances of price cutting and showing their extensive field efforts in enforcement of the policies, and we also have physically obtained and there are incorporated as Commission's exhibits 87, 88 and 89, specimen blacklists of the type used by the distillers, Seagram's in particular in this case, and exhibit 189-C in the *Seagram case* is their statement of their policy in that regard.

Mr. BERGE. Mr. Chairman, may I ask a question. I suppose that until the passage of the State Fair Trade Acts and the Miller-Tydings act there wasn't the slightest doubt that agreements of this kind were illegal as a matter of law.

Mr. MOREHOUSE. I never had any doubt, and I am sure the Commission never had any doubt, nor did the courts.

Mr. BERGE. What defense could they possibly make for this sort of practice, at least in the District of Columbia?

Mr. MOREHOUSE. Of course I might call attention to the fact that I was trying the *Seagram case* and had rested for the Commission at about the time when the Miller-Tydings Act became law, so that that restrained my efforts considerably.

The CHAIRMAN. In other words, Congress intervened to throw you out of court.

Mr. MOREHOUSE. But we did get the order applicable to all their practices insofar as the District of Columbia was concerned, but our investigational efforts, while very extensive and comprising huge volumes of exhibits and interviews, it so happened related only to principally the New England States and Atlantic Seaboard, most of which adopted these price-fixing laws. Some people call them fair-trade laws; I like "price-fixing" laws.

The CHAIRMAN. If I remember correctly, the Miller-Tydings Act was added as a rider to a District of Columbia measure of which the Senator from Utah had charge.

Senator KING. And the Senator ought to remember that it was a rider and that I opposed it vigorously.

The CHAIRMAN. I remember that very distinctly.

Senator KING. Did you vote with me?

The CHAIRMAN. I think I did.

Senator KING. May I say I vigorously opposed it, but the pressure was so great that it passed the Senate, but the President manifested opposition to it and said in effect that if it were not for the imperative necessity of having the revenue bill, to which it was attached as a "rider," he would veto it.

The CHAIRMAN. Was it a revenue bill, Senator?

Senator KING. Yes, for the District of Columbia, a vital bill imperatively needed by the District, and the President—I am not criticizing him; perhaps he did the right thing—was opposed to it as evidenced by the statement to which he appended his signature.

I should add that on April 14, 1937, Mr. Ayres, then Chairman of the Federal Trade Commission, wrote to the President stating that the Commission recommended against the enactment of the Miller-Tydings amendment, stating the view that "the potential damage to consumers through price fixing would be much greater than any existing damage to producers through this form of price cutting."

Much could be said in support of the position which I then took and which I understand the Federal Trade Commission is ready to take in opposition to the Miller-Tydings bill and the principle therein involved.

Mr. BERGE. The real point I wanted to bring out, though, was whether they had any other defense to this conduct than the State fair trade acts and the Miller-Tydings Act.

Mr. MOREHOUSE. Oh, yes; they employed very able lawyers and presented numerous defenses, among which, of course, they didn't have the Miller-Tydings Act at the time they were putting on their defense. One defense was that, first, they didn't do it; the next was, if they did do it they had a right to do it; and the third one might be summarized by saying it was a good thing anyway.

Mr. BERGE. Assuming that they did it, how could they get around the Supreme Court decisions which clearly made resale price maintenance agreements illegal?

Mr. MOREHOUSE. Of course, at that stage of the proceedings there was no legal argument offered for either side. We were just taking testimony. I don't see how they could, either, but we hadn't reached, and never did reach, the stage of argument, so I don't know whether they would have had the temerity to argue it was legal.

Mr. BERGE. I wonder if this case wasn't a pretty good example of what could be accomplished under the Fair Trade Act.

Mr. MOREHOUSE. I think it is.

Mr. BERGE. Doesn't it amount to this, that through a vertical agreement in an industry you can accomplish what is forbidden if attempted horizontally; that is, the retailers can be bound by dictation of the manufacturers to maintain what might be substantially the same or even higher prices than they would fix by horizontal agreements with their competitors? Don't you have here a situation where the very thing that is clearly forbidden by agreements of competitors is permitted?

Mr. MOREHOUSE. If I may say so, it has always been my opinion, based upon what little experience I obtained from the Seagram case, that it has that effect, that it is impossible to have a vertical price maintenance without at the same time having in practical effect horizontal price uniformity wherever you have competing branded goods of the same class. It works out that way.

The CHAIRMAN. You may proceed, Mr. Morehouse.

Mr. MOREHOUSE. Thank you.

The next case involves calcium chloride, brought under section 5 of the Federal Trade Commission Act, and is a recent case decided by the Commission in December 1938.

The Columbia Alkali Corporation and three other companies who together were the only manufacturers of flake calcium chloride in the United States, and who also manufactured over 75 percent of all other forms of calcium chloride, controlled the sale and distribution

of a substantial majority of the entire output of this product in commerce. Normally and except for the actual acts and practices which I will refer to, they would have been in active and substantial competition.

During the period between November 1937 and January 1938 they entered into understandings, agreements, and conspiracies to fix and maintain and they carried out these agreements to fix and maintain uniform prices. To aid them in the accomplishment of this purpose they maintained a uniform zoning system, exchanged information with respect to the prices which each was to charge for calcium chloride in its various forms, and suggested what the retail prices should be. If it in any event developed that there was to be a change in prices, they would make the same change at the same time, and they offered identical bids for carload and less-than-carload lots to prospective purchases; they uniformly eliminated discounts for prompt payment, and made identical raises in prices, always acting in concert one with the other.

The Commission found that these acts and practices were to the prejudice of the public and had a dangerous tendency to hinder and prevent price competition in the sale of calcium chloride in various forms in commerce in the United States, and constitute an unfair method of competition.

A copy of the Commission's findings as to the facts, conclusion and order to cease and desist is submitted herewith, which order is in the exhibits, marked 81-E.

Senator KING. Before you proceed, may I ask you a question?

Mr. MOREHOUSE. Yes.

Senator KING. In the numerous cases to which the attention of the Commission has been brought during the past year or two, have they not discovered that many of those against whom complaints were made predicated their conduct or justified their conduct upon the N. R. A., that the organization or the acts which were complained of were the result of the codes which were prepared under the N. R. A.?

Mr. MOREHOUSE. There have been a few, maybe, you might term it many, such cases. I do not know that this particular one is one, but there were several, and I think the record shows that I called the attention of the committee to some of them during the previous session.

Senator KING. In the case you examined a short time ago, about the building materials, cement and so on, a very large organization, did not the respondents, at least some of them, justify their course by pleading the N. R. A.?

Mr. MOREHOUSE. I am just now informed by the attorney who tried the case that that is correct.

Senator KING. So we are finding the repercussions now in some of these alleged monopolistic practices, of the National Recovery Act. You needn't answer that if you don't want to.

The CHAIRMAN. That is a statement by the Senator, it isn't a question.

Mr. MOREHOUSE. I so took it, Mr. Chairman, please.

Senator KING. Which the testimony of the witness corroborates.

Mr. MOREHOUSE. We have covered quite a lot of commodities. Now we come to corn cribs and silos. In 1938, December, also, the Commission decided a case of the Rowe Manufacturing Co., an Illi-

nois corporation, which together with another Illinois corporation and two Iowa companies, one individual and a partnership, made and sold combination wood and wire portable corn cribs and silos. Together they produced the major portion of such products in the industry, and were so large and influential as to control that trade. Portable corn cribs and silos are made from pine picket lathing measuring 4 feet by $1\frac{1}{2}$ inches by $\frac{1}{2}$ inch, and spaced 2 inches apart, woven together with wire, something on the order of snow fencing, differing only as to use, largely used by the corn producing States of the Middle West, especially Iowa, for the storage and preservation of corn, ensilage and other corn products. Normally these concerns were in competition with each other.

They entered into joint agreements and combinations and conspiracies to fix and maintain prices, allowing the Rowe Manufacturing Co. to act as a clearing house for the exchange of price information and suggestions as to what prices should be charged. Having initiated this for the State of Iowa during 1936, they began to apply it to the other corn States as closely as possible. They had uniform prices, common basing points, and made all price changes effective simultaneously. They reported price cutting, stimulated and encouraged others to report it, and acted upon such reports for the purpose of eliminating all price concessions. The Commission found that this raised the prices on portable corn cribs and silos to the farmer in the above-named States and placed in respondents the power to control and enhance prices, and ordered them to stop as tending to create a monopoly.

One interesting and quite recent case in which the Commission issued its order in January of this year involved automobile carburetors and parts, the Carter Carburetor Corporation. That was a Delaware corporation engaged in business at St. Louis, Mo. It made and sold carburetors and parts for original standard equipment and for replacement. Together with the Bendix Corporation, in 1937 it supplied carburetors to more than 90 percent of domestic passenger cars. Marvel and Tillotson carburetors, and recently Chandler-Groves have been made standard equipment on some popular makes of automobiles. In 1937, 60 percent of the passenger cars and trucks were equipped with Carter carburetors, and for 3 years prior to 1937 on more than half of all passenger cars and trucks Carter carburetors were standard equipment.

Business in carburetors has two principal branches, original equipment and replacement. The ordinary automobile owner doesn't know what kind of carburetor he has in his car any more than he can tell you off-hand what the number of his license plate is. In order to establish the Carter carburetor business, it has been found in this industry it is necessary to maintain a system of service stations throughout the country that will enable the automobile driver to get service on his particular make of carburetor when he requires it. This is also necessary before a competing carburetor could be accepted by any automobile manufacturer as a standard of equipment. It is also necessary to equip and maintain rather a specialized group of mechanics who are competent to make repairs and adjustments and keep them throughout the field to work upon the particular make of carburetor.

A carburetor is a very complicated device, the particular one in question having some 150 to 170 parts. Carter, during 1937, sold 1,635,000 of its carburetors to automobile manufacturers as original equipment, and in the same year more than 103,000 replacement carburetors. The price on them ranged from \$10 to \$28.

This business that I have described, of repairing automobiles and automobile equipment, is carried on by about 60,000 independent service stations, about 7,000 of which specialize in the service of electrical equipment and carburetors. Practically all such carburetor service stations carry and sell Carter carburetors, so a large part of this business is handled by these 7,000 specialized service stations.

These stations had always been accustomed, for the reasons which I have heretofore explained, to deal in and stock parts of competing carburetors. The gist of this case is simply that Carter devised a means whereby they had to cut out the competing lines and parts or he wouldn't give them his price concession, and he signed up agreements with the majority of his dealers so that they eliminated the competing parts, or else they hid them under the shelves and wouldn't display them, and in that way he built up his business.

Carter didn't enter the service field on a large scale until about the year 1930. Then it put out a general-parts cabinet, containing replacements for all these 150 to 170 parts, to about 6,000 stations. They were known as cabinet stations, and they got a 40 percent discount, as compared with Carter's general trade discount of 25 percent.

Then he began to threaten them with the withdrawal of that extra discount if they continued to deal in competing lines. That is what the case was about, in substance. Field representatives were instructed to insist upon enforcement of this new policy, and it resulted in considerable damage to the competing lines of carburetors.

The Commission found that the effect was to substantially lessen competition and create a monopoly in the sale and distribution of carburetors and parts. They found that Carter had induced, coerced, and compelled a large number of service stations throughout the United States to refuse to deal in and purchase the products of the Chandler-Groves Co. This closed to that competitor a substantial number of actual and potential service station outlets for its products and diverted business and trade from it to Carter, and prevented the service stations from dealing in a full line of such products and giving the necessary effective service to the public. Copy of the Commission's findings is among the exhibits.

MR. DAVIS. Mr. Morehouse, I find that there is some inquiry as to the use of calcium chloride.

MR. MOREHOUSE. Calcium chloride?

MR. DAVIS. Calcium chloride, which you discussed in a previous case.

MR. MOREHOUSE. Do you know? I don't know.

MR. KELLEY. We had two price-fixing cases, one calcium chloride and one liquid chlorine. I do know in the liquid chlorine case it was used largely by communities for purifying water, and the communities complained about identical bids and uniformity of prices. In that case there was a very wide use of liquid chlorine for use in purifying water.

MR. MOREHOUSE. Calcium chloride, Judge—I'd heard this but wasn't sure of it and just had it verified—was used in connection with roads. It is a chemical used on roads, principally.

The CHAIRMAN. For what purpose?

Mr. DAVIS. For surfacing unpaved roads to settle and to hold down the dust and to form a binder to shed the water, rainfall, and so forth. They didn't want to go to the expense of paving.

The CHAIRMAN. So that in each instance the effect of the combination was to increase prices to public bodies.

Mr. MOREHOUSE. That is right.

Mr. DAVIS. For public use, either the purification of water in cities or to improve roads, highways, generally country roads, and so forth.

Mr. FRANK. Mr. Morehouse, in these cases that you have been describing, would there be a civil action by the party injured prior to the time you entered your cease and desist order?

Mr. MOREHOUSE. I suppose there would be if he would prove his case.

Mr. FRANK. Does the treble damage section cover matters other than violation of the Sherman Act?

Mr. MOREHOUSE. I would have to look at that. I don't think so.

The CHAIRMAN. It is in the Clayton Act, is it not?

Mr. FRANK. Some of these cases would not be Sherman Act cases, would they?

Mr. MOREHOUSE. It wouldn't have to be a Sherman Act case for them to get treble damages.

Mr. KELLEY. Some cases would not, but every case Mr. Morehouse has related to this committee would also constitute a violation of the Sherman Law.

Mr. FRANK. So there would be an action for treble damages on the part of the person aggrieved.

Mr. MOREHOUSE. I think so, yes. May I proceed?

The CHAIRMAN. Proceed, please.

Mr. MOREHOUSE. Also in January 1939, the Commission issued an order to cease and desist against the National Biscuit Co., a New Jersey corporation, selling bakery and packaged food products, including over 500 varieties of biscuits. It is the largest company, of course, of its kind in the United States. It has factories in more than 21 different States, and with sales branches in approximately 257 cities.

It maintains a very extensive sales and delivery organization. It sells and delivers directly to retailers by motortrucks. Among its competitors, many small concerns do not have localized delivery services and depend largely upon jobbers and wholesalers for their marketing outlets. So the National Biscuit Co. entered into agreements with certain jobbers and wholesalers whereby it would pay them a percentage or discount on sales by the company to certain allocated groups of retailers when the particular jobber or wholesaler to whom the percentage or discount was paid performed little or no service in connection with such sales. In return, the wholesalers and jobbers agreed not to deal in competitive products. Many customer and noncustomer wholesalers and jobbers received these discount upon these understandings and agreements. The purpose, of course, was to prevent the wholesaler and jobber from dealing in the products of competitors and to prevent retail dealers in competitive products from receiving the customary and ordinary services of jobbers or wholesalers upon which they were entirely dependent, not having this big motortruck delivery organization.

The Commission found that these practices tended to greatly curtail the services of jobbers and wholesalers in the marketing of their products, and so long as the jobbers and wholesalers continued to receive compensation from the National Biscuit Co., the largest and most dominant factor in the industry, all resulting to the prejudice and injury of the public and the National Biscuit Co.'s competitors.

The findings, conclusion, and order are among these exhibits, marked 81-H.

Mr. DAVIS. Mr. Chairman, it is the noon hour and there is one more case that Mr. Morehouse had contemplated discussing in some detail, but I suggest that perhaps we might conclude his discussion of these specific cases now and just let the other go in the record, although we would be perfectly willing to continue indefinite discussion of the cases.

Senator KING. How many more did you have in mind?

Mr. DAVIS. There is just one more.

Mr. MOREHOUSE. There is only one and it is along the same general lines. I was about to suggest that myself.

The CHAIRMAN. If there is no objection, the prepared statement which you have made available to the members of the committee with respect to the American Flange & Manufacturing Co., Inc., Docket No. 3391, will be printed in the record as part of your presentation.

(The Federal Trade Commission report on the American Flange & Manufacturing Co. was marked "Exhibit No. 307" and is included in the appendix on p. 2172.)

Mr. MOREHOUSE. Very well, Mr. Chairman.

Mr. DAVIS. Mr. Chairman and gentlemen of the committee, that document which Mr. Morehouse holds which has already been described in general terms as being in three parts, two parts of which deal with cases, one part the restraint of trade cases, or including those, which Mr. Morehouse has discussed but involves quite a good bit more than that, and then the Commission's experience with Section 7, Clayton Act cases, and then the third part of the economic investigation which the Commission has made, all of which is indexed as to subject, industry, and the company involved, and all that, is in very concrete, usable form, and it occurs to me that it would be well to insert that in the record even though there may be some duplication as between that and the discussion.

The CHAIRMAN. You mean for printing in the record and not for filing?

Mr. DAVIS. Well, most of its contents will not be presented orally.

Mr. MOREHOUSE. May I make this suggestion, Judge Davis and Mr. Chairman, if you please: If that is to be done I don't see why it couldn't be printed in the record with the elimination of the cases which I have verbally discussed. That could be omitted, and I myself think this will be a very useful document for the committee to have; it was prepared for that purpose, and if there is no objection I would like to offer it.

The CHAIRMAN. How many pages are in that?

Mr. MOREHOUSE. It is hard to tell exactly because we have had to make so many insertions. There are only 342 pages numbered, but some of them run "a" and consecutive letters, so I suspect there

will be about 375 pages, not more than 375, which covers the whole presentation.

The CHAIRMAN. That is, typewritten pages?

Mr. MOREHOUSE. Yes; one of these typewritten pages, I noticed, Senator, made up on the press release only about a third of a page.

Senator KING. So there would be a little over a hundred pages of the printed record.

Mr. MOREHOUSE. I am speaking of the mimeographed press release. I don't know about the printed record. I don't know how much is in there. I wouldn't be competent to make that estimate. I should say that one of these pages would cover about three of these typewritten papers, I should think.

Senator KING. Then there would be about a hundred pages. You have 300 there.

Mr. MOREHOUSE. Nearly 400, about 375.

Senator KING. I didn't quite understand Judge Davis' statement as to the contents of that document which you have before you there, Mr. Morehouse.

Mr. MOREHOUSE. This document starts with 59 cases digested as concisely as possible, including the 15 which I verbally explained to the committee. Then, of course, it has in the back of it a list of the Commission's pending complaints, just a list of them, with a brief paragraph about them explaining why we don't think it wise to discuss them when they are pending for trial. Then part II deals with the Clayton Act exclusively. The first half of it takes up all the cases—there were some 10 or 11—and which Mr. Kelley is going to present following me, involving section 7 of the Clayton Act, and details the history of the court proceedings, just a brief digest similar to the ones I have explained except that they relate to the Clayton Act. The details are in these exhibits. There are no details in here. The second part about the Clayton Act relates to a brief résumé of the Commission's informal investigations.

The CHAIRMAN. This is a compilation which is available no place else?

Mr. MOREHOUSE. The last part takes up some 20 economic studies that the Commission has made, describing in briefest kind of outline the detail and scope of the Commission's study and indicating, where recommendations were made, what the recommendations were. That is the third.

The CHAIRMAN. Unless there is objection by some member of the committee the request of the Federal Trade Commission that this study which was prepared by the Federal Trade Commission at the request of the committee will be printed in the record.

(The bound volume labeled "Federal Trade Commission—Report of Monopolistic Practices in Industries," was marked "Exhibit No. 308" and is printed separately as Hearings, Part 5-A).

Senator KING. I would like to ask a question. In view of the acceptance of this memorandum, will that make necessary the printing in the final compilation of our proceedings of the testimony which you heretofore have given?

Mr. MOREHOUSE. I have not followed that exactly at all times, and I would suggest that it might be just as well to omit those cases from the report that I did detail here. There is no use duplicating it; certainly.

The CHAIRMAN. But you were subject to inquiry and there was a good deal of colloquy intermixed with your testimony, and it is the feeling of the Chair that both the testimony and the report should be printed.

Senator KING. Obviously, the testimony which Mr. Morehouse has given should be printed in the record. I was wondering if there are duplications in this memorandum or document which you have just handed us, of your testimony, whether those cases might be deleted from this memorandum and not printed in the record.

Mr. MOREHOUSE. I don't think there is any necessity for printing in the record the cases which are in here and which I have talked about.

Senator KING. That is the point which I have tried to make. I would suggest, then, Mr. Chairman, that Mr. Morehouse eliminate from this document the cases to which he has testified, because as he states, the document and the testimony somewhat duplicate each other.

The CHAIRMAN. Without objection, it will be so ordered and the report will be withheld from publication until Mr. Morehouse has had the opportunity to examine it and eliminate the duplications.

Mr. MOREHOUSE. I might also suggest, Senator, please, that in the next order of procedure, after Mr. Kelley addresses the committee, there will be certain of the economic studies taken up, 3 out of the 20 or more that are in there, and they should also if they are taken up verbally be stricken from the written report to avoid duplication there.

The CHAIRMAN. Do any members of the committee desire to ask Mr. Morehouse any additional questions?

Mr. DAVIS. He will be available here after lunch.

The CHAIRMAN. The committee will stand in recess until 2 o'clock this afternoon when I understand Mr. Kelley will proceed.

(Whereupon, at 12:15 p. m., a recess was taken until 2 p. m. of the same day.)

AFTERNOON SESSION

The committee resumed at 2:15 p. m. on the expiration of the recess

The CHAIRMAN. The committee will come to order, please. Mr. Kelley, you are to take the stand this afternoon. I was waiting because I wanted a very full meeting of the committee to hear your contribution, because I know that it is going to be a valuable one. Judge Sumners has been detained by the fact that he has a meeting of the House Committee on the Judiciary, which he hopes will conclude in just a few moments. Mr. O'Connell, of the Treasury Department, and Mr. Arnold, of the Justice Department, have also been detained, but I fancy they will be here shortly. It is getting a little bit late, so I thought we would just as well proceed.

In accordance with the rule, I will administer the oath. Do you solemnly swear the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing by the truth, so help you God?

Mr. KELLEY. I do.

Judge DAVIS. Mr. Ballinger desired to make a brief statement before Mr. Kelley.

The CHAIRMAN. Very well, Mr. Ballinger.

SECTION 7 OF THE CLAYTON ACT

Mr. BALLINGER. I am just going to speak briefly on the importance of section 7, its importance to the future of American industry. This section of the Clayton Act is now regarded as a dead law, but the Commission is very anxious to put some life into it. This law was originally passed to prevent the concentration of the control of production in American industry, and to take out of the hands of the would-be monopolists one of their favorite technics for creating monopoly.

So long as monopolists enjoyed the right of unrestricted merger, combination, and purchase of competitors' assets, it became a very simple matter in some cases to weed out the numerous competitors in an industry so that they would come down to about 4 or 5 or 10, and then it became easier to enter into conspiracies to restrain trade. So Congress accordingly decided industry should grow by what are called natural methods of growth by reinvestment of a company's surplus in the business but not by entering into combinations or mergers with its competitors or acquiring their assets. Since this law has become a nullity the Commission is engaged at the present time in studying the causes of bigness in the United States, especially since 1914, after this law was passed. We are trying to find out how much bigness in American industry is due to combination and merger, how much of it is due to natural methods of growth, how much of it is due to unfair methods of trade. We hope, at some future date, to present the fruits of the study to the Temporary National Economic Committee.

Now, a restoration of section 7 seems to the Commission to be very important. In the last 6 years we have had another great industry come on the scene in American industry. Within the short space of 6 years five concerns have got a preponderant amount of the production in that industry, and as was the case at the time when section 7 was passed, so is the case today: this concentration of control has flowered into monopoly and monopolistic practices. We are going to have a great many new industries coming on in the next year or 20 years from now, and we want this law vitalized so that as competition ushers in new industries this competition may be preserved and protected.

But perhaps the most fundamental interest of the Commission in vitalizing this law is that if you leave the right of unrestricted merger and combination open, it is possible to create one of the most dangerous types of monopoly, the price-leader type of monopoly. This type of monopoly is often beyond the pale of existing law, because you can't find any evidence of conspiracy or collusion.

If you create one unit in a field sufficiently large, the very existence of that unit with its vast financial resources acts as automatic intimidation to smaller competitors who may have cheaper and more economical costs of production, and who should on strict capitalistic and competitive theory be challenging the prices that are laid down by these cumbersome giants. But prudence dictates they follow the leader, because if they do this thing which is the thing we would like to have them do, it might be followed by selling below cost, in which event their financial assets couldn't possibly match those of the giants and they would inevitably go under. And so for that reason we don't want a big loophole through which monopoly can be generated—a

monopoly extremely difficult to get at. A revitalized section 7 would do much to mitigate the creation of a dominant giant in an industry, the effect of which bigness is not necessarily efficiency but is rather a power to intimidate smaller competitors from competing and to create a monopoly which can keep its skirts clear of existing law, because it is often unnecessary for this big fellow to conspire with these smaller competitors to refrain from competition. It is only when competitors are fairly equal in strength that conspiracy to refrain from competition becomes important. When one concern is very much more powerful than any of its other competitors, it can establish a leadership in prices often without any necessity of conspiring with the small fry. And such a situation is just as monopolistic in substance as if there was an actual agreement among competitors to conspire to refrain from competition.

The CHAIRMAN. Mr. Ballinger, you spoke once of the restoration of section 7, almost implying that it had been repealed, whereas of course it has not been repealed, it has been devitalized or interpreted in such a way as to make ineffective the purpose of Congress when it was passed. I assume that that is one of the subjects that Mr. Kelley will undertake to discuss. Do you care at this time to put into the record at the beginning of your testimony the text of section 7?

Mr. KELLEY. I will come to that in the course of my talk. I will refer to the pertinent parts of it.

TESTIMONY OF WILLIAM T. KELLEY, CHIEF COUNSEL, FEDERAL TRADE COMMISSION, WASHINGTON, D. C.

Mr. KELLEY. If you please, Mr. Chairman and Members of the Committee, the Federal Trade Commission desires to submit some facts and observations with respect to section 7 of the Clayton Act, "An Act to supplement existing laws against unlawful restraints and monopolies, and for other purposes," approved October 15, 1914.

The Clayton Act has been in effect 24 years. The act, as its title and the history of its enactment show, was intended to supplement the purpose and effect of the Sherman Act of 1890. It was designed to eliminate certain practices which in the opinion of Congress were monopolistic in tendency and effect.

Section 7 attempted to deal with the vital problem, which was before Congress at that time, growing out of the unprecedented concentration of control over competition in various lines of industry, which had been achieved by some large corporations by the use of a process of consolidation with competing corporations.

I just referred to some large corporations. I have particularly in mind the American Tobacco Co., the Standard Oil. and the United States Steel consolidations.

In reports about the makers of farm machinery and the processors of the principal farm products presented to the Congress in 1937 and 1938, the Federal Trade Commission found that absorption of competitors is still largely responsible for concentration of control. Such absorption has been the chief means of growth of the large milk and dairy-products companies¹ and the large farm-implement manufacturers, and in recent times of the large wheat-flour millers.

¹ For hearings on the dairy industry see *Hearings*, Part VII.

I might say here in this connection that I particularly refer to the National Dairy Products Corp., Borden, Swift, and Armour, and the International Harvester Co. and General Mills.

Prior to 1914 corporate consolidation had largely followed the channel of one corporation acquiring the capital stock of competing corporations or of the formation of a holding company to take over the stock of two or more competing corporations. Congress in section 7 undertook to prohibit these practices where their effect was substantially to lessen competition. In the face of this statutory prohibition other means were soon devised which were equally as effective in bringing about the eliminatin of competition and the creation of monopolistic conditions. Among these methods are: For one corporation to acquire the control of a competitor through purchase of its voting stock and then use the stock to obtain its physical assets and going-concern value; or to create a holding company to purchase the voting stock of competing operating companies and then vote the stock to obtain title to assets and effect a consolidation of the competing properties; or for one corporation to purchase outright the factory, equipment, goodwill of a competitor or competitors. This latter method, the purchase of assets or merger of properties as distinguished from the purchase of capital stock is not prohibited by the Clayton Act. Of course the Commission has not instituted proceedings where competiion was suppressed solely by a purchase of assets.

From time to time, since 1927, the Federal Trade Commission has called to the attention of Congress the situation created by these developments and to the comparative futility of its efforts to carry out the legislative mandate insofar as the suppression of the evil originally aimed at was concerned.

Section 7 of the Clayton Act provides:

That no corporation engaged in commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital of another corporation engaged also in commerce, where the effect of such acquisition may be to substantially lessen competition between the corporation whose stock is so acquired and the corporation making the acquisition, or to restrain such commerce in any section or community, or tend to create a monopoly of any line of commerce.

And that—

No corporation shall acquire, directly or indirectly, the whole or any part of the stock or other share capital of two or more corporations engaged in commerce where the effect of such acquisition, or the use of such stock by the voting or granting of proxies or otherwise, may be to substantially lessen competition between such corporations, or any of them, whose stock or other share capital is so acquired, or to restrain such commerce in any section or community, or tend to create a monopoly of any line of commerce.

Section 11 of the Clayton Act provides that if the Commission finds that any of the provisions of section 7 have been or are being violated, it shall issue an order requiring the offending corporation to cease and desist from such violations, and divest itself of the stock held in the manner and within the time fixed by said order.

The power conferred by section 11, I will later show, becomes very important.

The first important complaint under this section was one issued by the Commission in 1919 against the Aluminum Co. of America. At that time the Aluminum Co. was the sole producer of pig aluminum

in the United States and it produced about one-half of the world's output of the metal. The Aluminum Co., through subsidiary companies, manufactured sheet aluminum and a large variety of fabricated and unfinished products. The Aluminum Co. had three competitors who manufactured and sold aluminum sheet from raw material which they imported. One of these competitors was absorbed by the Aluminum Co., the other was small and relatively unimportant. The third competitor was the Cleveland Metal Products Corporation.

In 1918 the Aluminum Co. and the Cleveland Metal Products Co. organized a new corporation known as the Aluminum Rolling Mills Corporation with a capital stock of \$600,000, of which the Aluminum Co. took \$400,000 and the Cleveland Co. \$200,000.

This new corporation then took over the Cleveland Co.'s sheet aluminum business. In this way the Cleveland Co.'s sheet aluminum business, the only competitor of any consequence of the Aluminum Co., came under the control of the Aluminum Co.

In view of the language of sections 7 and 11 of the Clayton Act, the case presented some technical difficulties for the Federal Trade Commission. The Aluminum Co. did not directly buy the stock of a competitor. It organized an affiliate company which purchased certain assets of the competitor. However, upon careful study and analysis of the evidence in the case, the Commission came to the conclusion that the new corporation had taken over not only assets but a rolling-mill business, and that it had begun operating the mill before the transaction resulting in the acquisition of the stock by the Aluminum Co. was fully completed, and that as a consequence the Aluminum Co. had purchased the stock of a competitor engaged in commerce and that the effect was to substantially lessen competition and create a monopoly.

The circuit court of appeals took the same view and affirmed the Commission's order. A petition for certiorari for review of the decision of the circuit court of appeals filed by the Aluminum Co. was denied by the Supreme Court. In passing it may be mentioned that the practical effect of the judgment in this case was destroyed by a decision of the same court in 1924, when it denied the application of the Federal Trade Commission to modify the court decree so as to prevent the Aluminum Co. from bidding in at sheriff's sale the physical property of the acquired corporation in satisfaction of a debt which the Commission contended was fictitious.

A few months after the institution of proceedings in the *Aluminum case* the Commission instituted separate proceedings under section 7 against three meat-packing companies, Swift & Co., Armour & Co., and the Western Meat Co. In the *Swift case*, Swift acquired all of the capital stock of two independent packing plants, one the Moultrie Packing Co., located in Georgia, the other the Andalusia Co., located in Alabama. These two independent packing companies were prosperous and growing. Swift was in direct competition with them. These two plants furnished all the competition Swift and the other Chicago meat packers met in the sale of pork and lard and beef in the southeastern part of the United States.

Shortly after Swift bought the stock of these independent packing companies they executed a deed of trust of all of their property to Swift. Swift had acquired the packing plants before the Commission had issued its complaint. The Commission realized that to merely

order a divestiture of the stock was useless. After a careful consideration of the evidence the Commission found that the deed was for a nominal consideration and was a mere paper transfer, and it ordered Swift to restore the property to the independent packers and then to divest itself of the stock.

Swift appealed from the Commission's order to the circuit court of appeals. The circuit court affirmed the Commission's order. I would like to read an excerpt from the opinion of the circuit court in that case. The court said:

Must Congress act only when the child has grown to the stature of a giant? If authority exists to curb, or to dissolve, a corporation, when it has reached the trust stage, may Congress not take steps to arrest the corporation's growth before the final stage has been reached? Is our national-defense policy based upon an impending conflict, or a desire to prevent one?

The Government may under the commerce clause of the Constitution forbid every contract which is reasonably calculated to injuriously affect the public welfare. It may act to anticipate or prevent an unfortunate situation, as well as deal with one that existed.

The Clayton Act—

the court continued—

supplemented the Sherman Act, the practical enforcement of which was found difficult and often resulted in hardships to interested parties. The section under consideration sought by means which the Congress deemed expedient and effective to prevent a condition which the Sherman law was designed to overcome when once it existed. Certainly courts should hesitate to say that the means selected are not appropriate or primarily adapted to accomplish the desired end when it is conceded that the prevention of such ends through dissolution is within the recognized power of Congress.

If competing corporations may not consolidate, it naturally follows that it will be difficult for one corporation ever to monopolize an industry.

The case went to the Supreme Court. The Supreme Court reversed the Commission and the circuit court of appeals, holding that the Commission lacked the power to make such an order under the authority conferred upon it by section 11. The Supreme Court held that although the packing plants were obtained through an unlawful purchase of capital stock, that the Commission lacked authority to require Swift to dispose of them. Four justices, including the Chief Justice, dissented.

The *Armour case* was similar to the *Swift case*. The acquisition of the capital stock was followed by an acquisition of the property before the Commission issued a complaint.

In the *Western Meat case* it happened that the corporation had not voted the stock so as to acquire the assets before the Commission filed its complaint. Because of this circumstance, the Supreme Court sustained the power of the Commission to order a divestiture of the stock in a manner that would prevent merger of the assets.

In 1921 the Commission instituted proceedings against the Thatcher Manufacturing Co., which acquired the stock and then the physical assets and patent license agreements of five competitors engaged in the manufacture and sale of milk bottles in competition with each other and with Thatcher. The assets were acquired before the Commission issued its complaint. The circuit court of appeals agreed with the decision of the Commission that the stocks were unlawfully acquired and that since the property was obtained through the stock acquisitions, the Thatcher Co. should dispossess itself of the properties so as to restore previously existing competitive conditions.

The Supreme Court decided this case on the same day it handed down its decision in the *Swift case*, and held that sections 7 and 11 of the Clayton Act had no application to physical assets acquired prior to action by the Commission, even though the property was acquired by reason of stock illegally held. Three justices and the Chief Justice also dissented in this case.

There is necessarily a lapse of time between the institution of the Commission's inquiry into the facts and its issuance of the complaint charging the violation of law. Offending corporations may readily use this time to acquire the physical assets of companies whose stock they have previously acquired in violation of law.

The Commission pointed out in its 1927 annual report that the effectiveness of the section to fulfill the purpose of Congress was materially lessened by these decisions.

In March of 1928 the Commission issued a complaint against Arrow-Hart & Hegeman, a holding corporation, charging that it had violated section 7 of the Clayton Act by acquiring all of the common stock of two competing manufacturing companies, the Hart & Hegeman Manufacturing Co. and the Arrow Electric Co. On December 6, 1928, Arrow-Hart & Hegeman, the holding company, transferred the common stock of one of these manufacturing companies, to a newly created holding company, and the common voting stock of the other manufacturing company to a second newly created holding company. Steps were then taken to dissolve the original respondent; that is, the original holding company. On December 31, 1928, the Arrow-Hart & Hegeman Electric Co. was formed in a merger and consolidation of the two manufacturing companies and the two newly formed holding companies.

On June 29, 1929, the Commission issued a supplemental complaint, joining the Arrow-Hart & Hegeman Electric Co. as a respondent. The Commission, after hearings, found that the original holding company's acquisition of the common stock of the two manufacturing companies constituted a violation of section 7 of the Clayton Act in that the effect had been and was substantially to lessen competition between the two manufacturing companies in the sale and provision of electrical wiring devices in interstate commerce, to restrain interstate commerce in electrical wiring devices in various sections and communities, and to tend to create a monopoly in the electrical wiring devices industry; and that the transfer by the original respondent—that is, the original holding company—of the common stock to the newly created holding companies was not such an investment as to constitute a compliance with the Clayton Act. It concluded that the acquisition by the original respondent holding company, the first holding company, of the common stock of the two manufacturing companies and the continued ownership and control and the voting of said stocks by the said original holding company which culminated in the organization of the Arrow-Hart & Hegeman Electric Co., and the acquisition by it through merger of the common stocks and of the assets of the two manufacturing companies, constituted a violation of section 7 of the Clayton Act.

It ordered the respondent to divest itself of the stock and the assets of one or the other of the two manufacturing companies. The circuit court of appeals affirmed the Commission to order a divestiture of the assets under the principle of the Supreme Court decision in the *Stern*

Meat case. One judge dissented upon the ground that the order excluded the Commission's jurisdiction. The Supreme Court, with four Justices dissenting, held that the Commission had no power to make such an order, that its power was limited to divestiture of the stock originally acquired.

Well, we have this situation, having first obtained control of a competitor through purchase of its voting stock, the second step, that is, obtaining title to physical assets, is usually a comparatively simple matter. Although the first step violates the Clayton Act, the Court by a bare majority held that the second step does not, even though it is proved as it was in the *Arrow-Hart & Hegeman case* that the second step was made possible only because the first one, which was in violation of the law, had been taken.

Section 7 does not prohibit acquisitions of physical assets as distinguished from capital stock. The reason for this, no doubt, is the fact that stock acquisitions were the usual and ordinary method which had been used to effectuate corporate consolidations prior to the enactment of the Clayton Act in 1914. This is emphasized in the dissenting opinion in the *Arrow-Hart & Hegeman case*, in which Mr. Justice Stone said:

It is true that the Clayton Act does not forbid corporate mergers but it does forbid the acquisition by one corporation of the stock of competing corporations so as substantially to lessen competition. It follows that mergers effected, as they commonly are, through such acquisition of stock necessarily involve violations of the act, as this one did. Only in rare instances would there be hope of a successful merger of independently owned corporations by securing the consent of their stockholders in advance of the acquisition of a working stock control of them. Hence, the establishment of such control by the purchase or pooling of the voting stock, often effected in secrecy, is the normal first step toward consolidation. It is by this process that most corporate consolidations have been brought about, often by adding one consolidation to another through periods of years.

In its 1930 annual report the Commission stated that acquisition of assets "is now the usual procedure in effecting acquisitions, consolidations, and mergers." In its 1929 annual report the Commission referred to that period as "a day when mergers and consolidations are forming with a rapidity hardly foreseen even by the authors of the present antitrust laws."

When this section was debated in Congress in 1914, a large number of Senators were in favor of returning to the common-law rule that no corporation could own the stock of another corporation, and it was pointed out that in many of the States this was still the rule. A number of amendments were offered, prohibiting all stock holding between corporations engaged in interstate commerce in the same or a competing line of business, whether the effect might be to lessen competition between them or not. (Congressional Record, '63d Cong., 2d sess., p. 14459, rejected, 22 to 27; pp. 14467-14468, rejected, 16 to 36; p. 14473, rejected, 16 to 36.)

An amendment by Senator Walsh, of Montana, to eliminate all holding companies, whether of competing corporations or not, was rejected, the vote being 21 to 26.

Senator KING. Judge, some concrete cases have been brought to my attention, not recently, except one of them. May I, with the permission of the Chair, ask whether or not under the interpretation or under the cases which have been decided either of these would come within those cases as prohibited?

Two competing grist mills found that the field that they had, owing to the diminishing production of wheat and cereals, resulted in loss, and one bought out the other; I don't know whether they bought the stock or the assets. Now the case was clear that neither made profit and in the end both would go into the hands of the receiver. Do any of the decisions to which you have referred or which you may refer to regard that as improper and prohibited?

Let me cite the other case. The other is two mining companies. The smelters were competing, of course, for the ore, buying the ores of those who were producing from the mines, and there had been considerable rivalry in the purchase of ore, and to that extent the mine producers were benefited. Some of the mines closed down and one of the smelters found that it could not operate because it didn't have sufficient production. I think it was taken over by the other company. It salvaged a little of the million plus which had been invested in the production of the smelter. Would any of those decisions to which you have referred or may refer prohibit that transaction?

Another: Two mining companies were producing or mining lead ores and copper ores. They were almost side by side. The operation of one of the companies was larger than the other's because they had to sink a deeper shaft. If they had been permitted to crosscut and avail themselves of the shaft of the other company, that company might have been saved and the ore rescued from the ground which otherwise was lost. They merged. One company bought out the mining property that was adjoining it, and it operated then both mines through the same shaft. Would that be denounced under any of the decisions to which you have referred?

Mr. KELLEY. Well, I will say first, Senator, that in the cases I referred to and those that I will refer to later, the Commission found, after taking evidence, that there was substantial competition between the corporations and that the effect of the acquisition was to substantially lessen competition and tend to create monopoly. The competition was really substantial, and in addition the corporations were solvent and growing. There wasn't any likelihood of their passing out of the picture of competition because of failure.

I would say, if the Commission had before it the facts as you have just related them, that the Commission wouldn't issue a complaint because I think it would conclude that competition was either not substantial or that there was impending bankruptcy or failure to survive. However—

Senator KING (interposing). I was just going to say that I didn't want to ask you to prejudge. I merely wanted to know whether any of the cases which you had cited or might cite would deal with those three instances to which I have referred.

Mr. KELLEY. No; I don't believe so.

Mr. DAVIS. Another feature to which I wish to direct attention is that it is the duty of the Commission and it is the policy of the Commission under the act to consider whether or not a proceeding, even though a technical violation, would be in the public interest, and it isn't an infrequent thing for the Commission to decline or fail to issue a complaint in a case of a technical violation because it thinks there is an absence of public interest that would warrant proceedings, and if I may not be speaking out of school, along this same line, since I have been on the Commission there has been a consideration of an

alleged violation of section 7 of the Clayton Act which after investigation the Commission closed because it involved a merger of some smaller elements of an industry which we thought not only did not tend to monopoly but would make a couple of smaller elements better able to compete with their more powerful competitors.

Mr. KELLEY. Where several corporations, all of them remaining in business and continuing to produce and sell, mutually agree among themselves not to compete in a given territory, by the apportionment of customers, the fixing of common prices, or the establishments of common standards, there is no hardship on any of the parties to the agreement. Each is trying to increase his profits. The interest threatened in such cases is the public interest through the danger of unreasonably high prices or deteriorated quality or restricted output.

Cases at common law in this country hold that such agreements are unlawful if the parties possess power to control the market nationally or in any section or community. The power to enhance prices or to restrict output is sufficient to condemn them. Proof of actual evil results, such as that the price of the commodity was unreasonably high or that all competition in the trade was destroyed, is unnecessary so long as potential power to accomplish these things is present. Under the Sherman Act and the Federal Trade Commission Act a mutual agreement or combination between competitors is unlawful if it effects or aims at a control of the market. Power to work injury to the public is sufficient to condemn per se such an agreement or combination. Proof of actual injury to the public need not be shown.

However, where the suppression of competition is not brought about through an agreement between the parties, each remaining in business, but by merger or consolidation of competing properties, no one can state with any assurance that power to control the market and enhance prices is sufficient to condemn such a combination, and it is unnecessary to show by proof actual evil results.

The International Harvester Co. was created by consolidating five large competing companies which at that time controlled more than 80 percent of the trade in necessary farm implements. This combination, not the result of normal competitive growth or, subsequently controlled the major portion of the farm machinery industry and generally established the price of farm machinery.

In a suit by the *United States v. The International Harvester Company* under the Sherman Act, the United States district court held the combination in harvesting machinery to be in violation of the Sherman law. The district court saw no difference in the eyes of the law between the suppression of competition brought about through merger and the suppression brought about through an agreement of parties, each remaining in business. The court said:

We think it may be laid down as a general rule that if companies could not make a legal contract as to prices or as to collateral services they could not legally unite.

The company appealed to the Supreme Court from this decision, but while this was pending a consent decree was arrived at. A subsequent effort by the Government to revise this decree was defeated in the district court and this decision was upheld by the Supreme Court in 1927. The question whether the suppression of competition by agreement among corporations, if illegal, is equally so, if accomplished by merger or consolidation, was not directly in issue when the case

reached the Supreme Court, However, with respect to this consolidation the Supreme Court said:

The law, however, does not make the mere size of a corporation, however impressive, or the existence of unexerted power on its part, an offense, when unaccompanied by unlawful conduct in the exercise of its power.

I understand this if the Court had reference to the growth of a corporation by natural expansion and development, but if it means that there is no limit under our antitrust laws to the size of corporations brought about, not through natural growth and development but through corporate consolidation or merger, then it seems to be plainly out of harmony with other decisions of the Court and the philosophy of our antitrust laws.

Representative REECE. May I ask if the International Harvester Co. is still operating under the consent decree to which you referred?

Mr. KELLY. Yes.

In its 1937 annual report to the Congress the Commission made the following recommendation:

On a number of occasions the Commission has called attention to the fact that while this section now declares unlawful the acquisition by one corporation of the capital stock of a competing corporation where certain monopolistic tendencies and conditions may result, it does not purport to declare unlawful the acquisition of physical assets where similar tendencies and conditions may result. The Commission has also pointed out that this unforbidden method of accomplishing these similar results has been increasingly employed by corporations engaged in interstate commerce. The Commission has therefore recommended in earlier annual reports and upon other occasions and now renews its recommendation that the acquisition of assets be declared unlawful under the same circumstances that the acquisition of stock is already so declared.

In its recent report on agricultural income, pursuant to joint resolution of the Senate and House of Representatives, the Commission amplified the foregoing recommendation so as to preclude the acquisition of assets where the combined assets would exceed an amount to be specified by Congress.

The Commission in its report to Congress June 6, 1938, on the agricultural implement and machinery industry, made pursuant to public resolution, said:

The dominance and price leadership by these large companies is the result almost solely of their size and great financial strength; and this, in turn, was achieved very largely through merger, purchase of control of formerly competing manufacturers, and purchase of the plants and other assets of either competing, or other, farm implement companies.

The Commission believes that a merger of important competitors in an industry is likely to be even more destructive of effective competition than temporary price agreements or understandings. While the Clayton Act forbids a company to purchase the capital stock of another company where the effect may be to substantially lessen competition or tend to create a monopoly, the act does not forbid the purchase of the factories, equipment, or any other assets of a competitor, even though the result would be more effective than that accomplished by acquisition of stock.

The practice of merging competitors followed by various farm-machinery companies with respect to different lines has been going on for half a century, and has tended to a constantly increasing concentration of economic power.

The CHAIRMAN. Mr. Kelley, would it interrupt the continuity of your remarks to ask you here whether in your studies of the proceedings in Congress at the time section 7 was enacted, there was any suggestion upon the part of any Member of Congress in the debates that this method of evasion to which you have alluded would result?

Mr. KELLEY. I don't recall any, Senator, but there was considerable opposition by a number of Senators, notably Senators

Walsh and Cummins and Poindexter. They objected largely to the difficulty that the Government would encounter in proving a substantial lessening of competition and tendency to create a monopoly.

The CHAIRMAN. That is another matter.

Mr. KELLEY. Yes; that is another matter.

The CHAIRMAN. They were opposing the language which made it prerequisite for the Commission to find that the acquisition of the stock would result in substantially lessening competition, but what I am directing your attention to—

Mr. KELLEY (interposing). Strictly answering your question, I don't recall, Senator.

The CHAIRMAN. Wouldn't it be proper to say that Congress deemed the acquisition of stock as practically the exclusive method whereby competing concerns could be merged?

Mr. KELLEY. That is correct.

The CHAIRMAN. And that in forbidding the one company to acquire the stock of a competing company, the purpose of Congress was to prevent a merger of the assets.

Mr. KELLEY. Yes; I think it is safe to say that Congress thought that by making stock acquisitions unlawful they would stop in its incipency corporate consolidations, because they felt that largely corporate consolidations were brought about by first acquiring the stock.

The CHAIRMAN. It would have been very simple for Congress to have amended this first section so as to extend the prohibition to the acquisition of assets.

Mr. KELLEY. Yes. When the cases reached the Supreme Court the majority of the Court, I think, thought that section 7 was sufficient, but they thought that section 11 didn't sufficiently empower the Commission to follow the unlawful acquisition of the stock through to order divestiture of the assets. The minority thought it did, the cases went off in the Supreme Court largely on the question of a lack of power under section 11.

The CHAIRMAN. Not under lack of power under section 7?

Mr. KELLEY. Not so much; no.

The CHAIRMAN. Nevertheless it can be stated, can it not, that inadequate and inexpert drafting of section 7 resulted in the failure of Congress to make its will effective.

Mr. KELLEY. That is right, Senator. I don't think the blame is entirely on the courts. I think a good deal of it goes back to bad draftsmanship.

Senator KING. May not the drafters and Congress have accepted the view that the evils resulting from monopoly, from monopolistic practices, were developed by the acquisition of the stock, but by purchasing the assets, continuing the competing company, the danger of monopolistic practices was not so great, and therefore they would not entertain the prevention of the purchase of the assets of the corporation?

The CHAIRMAN. As I recall, Senator, I think that was just about the view that was expressed in a shoe case afterward. The court held that one of the competing concerns, the assets of which was acquired by the other, was manufacturing a different grade of shoe which would continue to be in competition.

Mr. KELLEY. The Standard Oil consolidation and the American Tobacco consolidation and the United States Steel consolidation were fresh in the minds of Congress in 1924. They wanted to stop those

things before they started, and I think, from the legislative history of the section, they thought section 7 would go a very long way in that direction.

The CHAIRMAN. One of the curious things, to me, in the history of the passage of the Trade Commission Act and the Clayton Act, arises from the fact that at that time the public prints were filled with a discussion of the decision of the Supreme Court in the *Standard Oil cases*, in which Chief Justice White was said to have interpolated the word "unreasonable" into the Sherman antitrust law. The Sherman antitrust law forbade every contract in restraint of trade, and in the *Standard Oil cases* it was said that that meant not every contract, but every contract in unreasonable restraint of trade.

Then Congress came along with the Clayton Act and forbade the acquisition of stock, not in every case but only in those cases in which the effect was to "substantially" reduce competition, thereby introducing an undefined word, raising the necessity of the exercise of discretion on the part of the Commission and the courts, whereas at that very moment there was great criticism of the Court for having interpolated a similar word which requires discretionary interpretation: "Unreasonable."

Mr. KELLEY. That is right; and not only that, but the courts, in interpreting section 7, have to a large extent given the Sherman law test, and in that sense have been legislating themselves.

The CHAIRMAN. It all goes to show that we are just human beings after all, very liable to err.

Representative Reece. Mr. Chairman: Mr. Kelley, if these consolidations had been brought about lawfully through the acquisition of physical assets, stocks or otherwise, can Congress now, by legislative enactment, break up these consolidated corporations?

Mr. KELLEY. I would say no, unless you are able to do it under the Sherman law. I don't think Congress can pass any retroactive act that will unscramble these conditions, Congressman. I think it would be unconstitutional.

Mr. BERGE. Would you say that the effect of section 7 has been to cause corporation lawyers, in planning mergers, to direct the plan toward acquisition of assets instead of stock acquisition? That is, has it not had the effect of pointing out a way of accomplishing the purpose that perhaps wasn't so clear before?

Mr. KELLEY. It has, in practically every case, and corporation lawyers are well aware of the loopholes.

Senator KING. Could you call that a loophole? There is the law, which prohibits it.

Mr. KELLEY. I will retract the word, Senator. I will say—

Senator KING. I think common experience and common interpretation of the law, regardless of lawyers, the interpretation of every man of sense who is running a business and had sense enough to run a business, would place the same interpretation upon the statute that you place upon it now under the decisions of the court. In other words, the lawyers were not the ones that evolved any line of conduct that might be at variance with morals or proper conception of duty which a lawyer owes to his client and to the court and to the country, but it was generally accepted by the court and by the country, by business men as well as those who were not business men, that that law did not forbid the acquisition of the assets.

Mr. KELLEY. It didn't forbid the acquisition of assets as distinguished from the acquisition of stock, but I have been trying to point out that corporations have acquired stock in violation of law and after acquiring the stock in violation of law where it substantially lessened competition and tended to create a monopoly, evaded the law——

Senator KING. You are putting into the chain a link which I did not place in the chain.

Mr. KELLEY. By acquiring assets before the Commission could act, and as I pointed out, the Supreme Court held that the extent of the Commission's power was to order divestiture of stock.

Mr. BERGE. I wasn't suggesting that the acquisition of assets was illegal under the law as framed, nor that Congress intended to make the acquisition of assets illegal. I was suggesting, however, by failing to make the acquisition of assets illegal they were leaving open a very important way of accomplishing the purpose.

Mr. KELLEY. That is true.

Mr. DAVIS. Mr. Chairman, I wish to observe too that I think it will be generally admitted that when we talk about acquiring or think about acquiring an interest in a corporation, and certainly prior to the method that was employed to at least avoid the application of Section 7 of the Clayton Act, we thought in terms of stock, of acquirement of stock in a corporation, rather than the acquirement of assets. It was almost the universal rule; any sort of a transaction for interest in a corporation was a transaction through stock, and that is what no doubt everybody had in mind and what the Congress contemplated when the act was passed.

The CHAIRMAN. And in any event it is clear that the Federal Trade Commission is still of the opinion that the prohibition should run to the acquisition of assets as well as to the acquisition of stock.

Mr. DAVIS. Yes; or if the act isn't so amended we may as well regard it as an absolute dead letter, and we would want the public to understand. All of the lawyers know now just exactly how to avoid the application—we will not say evade it, but how to avoid the application of section 7 in acquiring either all or part of the assets of a competing corporation. That is the whole picture. Of course, it is a matter of policy—we fully understand that—by the determination of Congress as to whether this situation shall be permitted to exist and that they shall, as they have in the past, proceed with mergers of competing corporations and the gradual growth of an industrial empire or whether an effort shall again be made to stop further procedure along that line.

The CHAIRMAN. Of course the public can be held only to an observance of what Congress actually said and not to an observance of what Congress intended to say.

Mr. DAVIS. Oh, yes; actually literally construed, and I want to say this, on what Senator King is speaking to, as one member of the Commission; we have found no quarrel with the declaration that the Commission is not authorized under the act to correct a divestiture of assets, except this, that where it was very clearly the result of a circuitous subterfuge, first the violation of the act and then during the time that they are being investigated or perhaps tried, they get a second hold and oust the jurisdiction and the order of the Commission, when if it had been in the courts the doctrine of *lis pendens*.

would undoubtedly have applied. We say the court could look through that and say that was unwarranted or a subterfuge to evade the jurisdiction of the court—I mean of the Commission.

Mr. FRANK. Mr. Kelley, it has been said by a legal historian that the statute of uses had no other effect than to add three words to a conveyance; that has been in effect the history of section 7 of the Clayton Act. It has meant merely a little more paper work for the lawyers?

Mr. KELLEY. That is all. It has been a good business for the lawyers.

A statement more in detail with reference to section 7 of the Clayton Act is to be found in part II, subdivisions (a) and (b) of the report of the Commission, which has already been filed with this honorable committee.

Subdivision (a) embraces those situations in which the Commission issued complaints charging violation of law. Subdivision (b) deals with matters in which investigation was made but in which complaint did not issue. In a number of these cases investigated by the Commission in which for one reason or another they did not issue complaint, there were 28 of them where the Commission found that there was an outright purchase of physical assets, the companies probably preferred to surmount the practical difficulties of such a method of acquisition to the uncertainties of a stock acquisition possibly in violation of section 7.

It has been my purpose in testifying before this Committee to briefly give an account of the efforts of the Commission to enforce section 7 of the Clayton Act and to develop rather simply the obstacles and difficulties encountered. By this narration of facts, I have attempted to show that section 7 has failed of its original purpose, principally because means not violative of the letter of the statute have been found to circumvent it.

I have proceeded on the premise that section 7 of the Clayton Act was intended to prevent concentration and control over the various lines of commerce and industry and that it was designed to forestall acts and tendencies in this direction which Congress considered to be inimical to the public welfare.

In expressing the conclusion that section 7 as it has been construed as it now stands is susceptible of easy evasion and is ineffective in enforcing the public policy laid down by Congress, I do so without any intention or desire to criticize. It is rather to call attention to factors which have prevented the attainment of the original objective of this legislation.

I have merely tried to bring out the fact that the policy laid down by the Congress in 1914 with reference to court combinations has been rendered ineffective for the reasons which I have outlined.

Mr. FRANK. Mr. Kelley, you answered a question directed to you by Congressman Reece to the effect that where these mergers have occurred not in violation of the statute as construed by the Supreme Court, Congress could not now undo the mergers or consolidations, and the like. Assuming that to be true—and I don't know whether it is true, frankly—then does not the so-called problem of monopoly, insofar as it is now existent as a result of those mergers and consolidations, become one, so far as any possible future legislation is concerned, rather of trying to bring about proper economic and socially

desirable use of the powers thus obtained than of now talking about what might have been done by Congress and what was not done by Congress?

Mr. KELLEY. Well, to a large extent I think that is true, Mr. Commissioner. It presents a very serious problem for this committee. On the other hand, thinking about the future, unless legislation is enacted we will have a repetition of the history of consolidation.

Mr. FRANK. Yes, but what I am getting at is that it is certainly true that over a large area of American industry those combinations and consolidations are already in existence. Now if it be true—I don't know that it is, I just have no opinion on the subject—that Congress now lacks the power to disintegrate those integrations, then is not the problem confronting this committee one of how those integrations may be made to be socially useful, assuming that in any particular instances they are not now so?

Mr. KELLEY. I think so.

Representative REECE. If Congress should now conclude that these acts by which the consolidations or mergers were brought about greatly affected the public interest, and thereby undertake to enact legislation controlling them or requiring them to be broken up, as was done in the case of the Holding Company Act, let us say, is it possible, do you think, that they might be gotten at in that way?

Mr. KELLEY. Well, Mr. Congressman, there may be a number of consolidations that were formed or accomplished in violation of the Sherman law. Of course, if so, they could be reached under the Sherman law. As to how far Congress can go in ordering a restoration of properties that have been merged, I wouldn't want to say. The act may be retroactive, you know, in that regard.

The CHAIRMAN. That reminds us of the old simile of trying to unscramble the scrambled egg.

Senator KING. Fortunately, though, Congress isn't omnipotent, so that it may not superimpose its judgment in violation of the rights of individuals under the Constitution.

The CHAIRMAN. Absolutely correct.

Senator KING. Some people seem to get the idea that the legislative branch of the Government is all powerful, it may say that black is white and thereby it becomes white. I don't accept that philosophy.

Mr. KELLEY. I don't either, Senator.

The CHAIRMAN. Are there any other questions to be asked of Mr. Kelley?

Mr. O'CONNELL. Mr. Kelley, you may remember that yesterday I asked you whether under section 6 of the Clayton Act which authorizes the Commission, as I recall it, to require annual special and other types of reports from corporations, the word "corporations" as used in section 6 was broad enough to include trade associations. My question was inspired by quite a bit of discussion that had been had as to trade associations prior to my question.

Mr. KELLEY. I don't know that I would like to answer that question except to talk out loud.

The CHAIRMAN. In other words, you want to answer it and yet not be committed.

Mr. KELLEY. Section 6 says that the Commission shall also have power to require corporations to do certain things. Now, a corporation has a definite and precise meaning in our law, and I don't think that a corporation would include an unincorporated trade association.

Mr. O'CONNELL. Well, Mr. Kelley, I should like to straighten that out because section 4 of the Clayton Act defines the word "corporation" as including among other things an association incorporated or unincorporated which is organized to carry on business for its own profit or that of its members.

Mr. KELLEY. Section 4 of what?

Mr. O'CONNELL. Section 4 of the Federal Trade Commission Act. I beg your pardon. Section 4 about which we were speaking was also the Federal Trade Commission Act. So that the definition of a corporation includes unincorporated associations. The reason I was raising the question was I didn't want the record to make it appear definitely that a trade association or other unincorporated association was not within the meaning of section 6 (b) of the Federal Trade Commission Act because, having heard as much as we have, during the recent hearings about regulation and registration of trade associations and that sort of thing, it seems to me that sooner or later the question might come up as to whether or not the Federal Trade Commission does not have under the existing law of section 6 (b) of the Federal Trade Commission Act authority to require reports from trade associations.

Mr. KELLEY. Well, I had forgotten the original Federal Trade Commission Act didn't define a corporation, and I recall at one time we issued a complaint under section 7 of the Clayton Act against the Massachusetts trust. It so happened that Chief Justice Hughes was then in private practice and represented the corporation, which was the Standard Oil Co. of New York, and he argued, and I think correctly, and he did successfully, that it being a Massachusetts trust it wasn't a corporation within the meaning of the act, and we always had that in mind, and when the Congress came to pass the Wheeler-Lea Act, we had them define corporation so that corporation now includes, as you just mentioned, associations.

Mr. O'CONNELL. What I was more interested in was the general question as to what the Commission had done or to what extent it had used the power which was conferred to it under section 6 of the Federal Trade Commission Act. Do you happen to know in general?

Mr. KELLEY. I can generally, but Dr. Walker can answer better than I can. That power was used almost altogether by the Commission in connection with these investigations of industry pursuant to resolutions of Congress.

The CHAIRMAN. Am I correct in assuming that section 6 is a sort of a carry-over from the old statute by which the Bureau of Corporations was originally established?

Mr. KELLEY. Yes, you are correct, Senator; but in addition section 6—

The CHAIRMAN. Of course, it has been amended.

Mr. KELLEY. Amended and given some very definite and broad powers.

The CHAIRMAN. The Wheeler Act, which is an enactment of only last year, is the one which has broadened the power of the Commission to investigate Massachusetts trusts and associations so that it is a jurisdiction not yet a year old for the Federal Trade Commission to check up on trade associations.

Mr. KELLEY. Judge Davis may help me out on this, but the Commission has used section 6 a great deal and does use it constantly in

connection with its general investigations, but in connection with its work under section 5 dealing with law violations it has used section 6 but little. There was no occasion for it.

Representative REECE. Mr. Chairman, unfortunately I was absent during part of your presentation, but I am wondering if you touched upon section 8, as to whether it is meeting the situation at present.

Mr. KELLEY. No; I didn't. If the committee likes, I would like to touch on it for a few minutes. Before I leave Mr. O'Connell, I do think that section 6 in that regard furnishes the Commission considerable power in that it can do what you just referred to with respect to requiring trade associations to file with the Commission information and reports.

Mr. DAVIS. Mr. Chairman, in that connection, and this is apparently something that Mr. O'Connell has in mind, it has been suggested by many and it has been seriously considered by the Commission several times as to the advisability of calling for quarterly or semiannual or annual reports from various members of industry in order to receive and assemble and disseminate information of general interest to members of the industry as well as the general public. That matter has been submitted to the Budget more than once, as to whether or not they would approve an appropriation sufficient for the Commission to enter upon that work because, as you doubtless understand, Mr. O'Connell, that would require a very considerable force of employees and a very considerable expenditure of money to engage in that work extensively enough to be generally useful, and the Commission, having no appropriation to approve that particular work, can't enter on it without an appropriation for that purpose, which has not been made.

Mr. O'CONNELL. Just to make my idea clear, I understood that something was said yesterday that indicated that section 6 of the Federal Trade Commission Act was not sufficiently broad to include trade associations, and I merely raised the question today to verify my understanding that the section with the definition was in all probability broad enough, and I didn't intend to indicate anything further than that. The thing that called for my first question, I will say, is that the President's message, as I recall it, included some recommendation as to a Bureau of Industrial Economics to have some function along the lines that Commissioner Davis has indicated with regard to the activities of industry to trade associations, to the collection of statistics, and so forth, and I didn't want the record to indicate something other than what is the fact as to what section 6 (b) means. That is all I had in mind.

Senator KING. Mr. Chairman, before we leave, before the Judge leaves the stand, I would like to make a suggestion or make an inquiry. There has been considerable discussion among some officials of the Government, and that was particularly true of our deceased friend, Mr. Oliphant, and others, of the propriety, if possible, of devising some plan under the terms of which there might be provision made for declaratory judgments.

You will recall, Judge, that we passed through Congress a provision whereby under controversies in judicial proceedings, in controversies between two individuals, declaratory judgments may be obtained. Recently a bill which I had the honor to introduce passed Congress, under the terms of which you may obtain what is in effect a declaratory

judgment with respect to the duties you are compelled to pay upon imported articles.

When the question was under consideration for the continuance of the life of the Reconstruction Finance Corporation, the matter was brought to the attention of the President and Mr. Richberg and others, as to whether or not some authority might not be given to the Federal Trade Commission to aid business and to aid persons in legitimate efforts to square their conduct with morals and with the law, to prepare and define or pass a law providing for what would be a declaratory judgment with respect to the validity of contemplated acts by individuals or corporations in business.

I was wondering if that matter has received the attention, informally, of the Commission or of you. I am not asking for the conclusions which have been reached, but whether it has received any attention.

Mr. KELLEY. It has received our informal attention. We have talked it over a number of times.

Senator KING. Before the hearings are concluded, if it meets with views of my colleagues upon the committee here, I hope that we may explore that matter a little further, because I am sure that that was in the mind of President Wilson when he recommended the Clayton Act and the act under which your organization is proceeding. He wanted some place that business, honest businessmen, might resort to to ascertain whether their conduct of their business, and that in the future, would square with the law or square with the highest degree of morality.

Mr. KELLEY. I think it is accurate to say, Senator, that President Woodrow Wilson had it in mind when he made the message to the Congress, but the Congress, after long—several months—study and deliberation, didn't adopt that view.

Mr. FRANK. Haven't there been statutes enacted since that time which do provide for something of that kind in other fields?

Mr. KELLEY. Yes; somewhat similar. Those were cases of actual controversy, though. I don't want to get into that subject today.

Senator KING. I just introduced it with the hope that we might get into it.

Mr. DAVIS. I would state that if the committee desires to do so, we would be very glad, before the conclusion of the hearing, to undertake to submit some material that may be helpful to the committee, but in passing I think we may as well understand that it involves a grave constitutional question.

Mr. FRANK. Just to clarify the situation, Mr. Kelley and Judge Davis, I did not have in mind *The Declaratory Judgment Act*. Perhaps the words "declaratory judgment" in this context involve the use of a popular term rather than words of art. I had in mind administrative determinations upon which persons could rely, and my suggestion was, and I think I am correct, that Congress has, since the enactment of the statutes under which you are operating, enacted other statutes which do provide for advance administrative determinations upon which the citizen may rely—in some cases after notice and opportunity to be heard by all persons interested and in some cases not—and I would suggest, Judge Davis, if the Federal Trade Commission contemplates bringing before this committee a discussion of that subject, it might be well to collate what has been done under those other administrative statutes to which I have referred.

Senator KING. When I used the words "declaratory judgment" I had in mind what my friend has so clearly expressed now, and the bill to which I referred is one under the terms of which you may now obtain an administrative ruling with respect to imports and the duties which you would be expected to pay, which would be binding upon the government, and that has resulted in saving large sums of money in litigation which would have been involved under the old procedure.

Mr. FRANK. Of course, such administrative action would not come under the section of the Constitution relating to controversies in judicial tribunals and therefore I doubt whether any constitutional question could be raised with respect thereto.

The CHAIRMAN. This matter, like every other matter, of course, is susceptible of various interpretations, particularly when we try to appraise what was meant by our predecessors. I have before me the message which President Wilson read to a joint session of Congress in January 1914. It is particularly interesting because he stated so well what I conceive to be the general purpose of this committee. He said:

We are now about to give expression to the best business judgment of America, to what we know to be the business conscience and the honor of the land. The Government and businessmen are ready to meet each other half way in a common effort to square business methods with both public opinion and the law. The best informed men of the business world condemn the methods and processes and consequences of monopoly as we condemn them; and the instinctive judgment of the vast majority of businessmen everywhere goes with them. We shall now be their spokesmen. That is the strength of our position and the sure prophecy of what will ensue when our reasonable work is done.

Then, reaching the subject to which Senator King alluded a moment ago, he said:

And the businessmen of the country desire something more than that the menace of legal process in these matters be made explicit and intelligible. They desire the advice, the definite guidance and information which can be supplied by an administrative body, an interstate trade commission.

Then he went on to explain his own meaning, saying:

The opinion of the country would instantly approve of such a commission. It would not wish to see it empowered to make terms with monopoly or in any sort to assume control of business, as if the Government made itself responsible.

And I think in that statement he drew the distinction which is in the minds of many who are very fearful of granting to any Government commission the power, the discretionary power, to say to A, B, and C, "You may combine; you may do thus and so," and to E, F, and G, "You may not."

Mr. DAVIS. Mr. Chairman, in connection with the matter under discussion I think it proper to state that the Federal Trade Commission has what might be termed daily callers on the part of members of business and members of the legal profession who want to discuss their problems. There are always trained, experienced members of our staff, some of whom are appearing before you and others of whom are chiefs of different divisions and expert in the subjects, who are always ready to talk with them informally. It is done constantly. We have the Trade Practice Board, for instance, and chief counsel, chief examiner, and all of those, and of course they are told that it is informal, and a member of our staff doesn't undertake to give an opinion upon a doubtful or controversial subject; but where it is clear, where the answer is possible without incurring any great risk, it is given to

them, and most of them go away satisfied. But the fellows who complain, who go away dissatisfied, are the ones who want the Federal Trade Commission to give them the green light to run straight through the law and to fix prices and curtail production. That is what it always resolves itself down to on the part of those who are persistent in obtaining an advisory opinion, and it is a matter of common knowledge—any of them in the Department of Justice can tell you that their experience has been the same—that if some prior official in a department upon an ex parte statement of facts, which can never be full and complete and really ever take into consideration what other affected people might say or what the injurious effects might be, undertakes to tell them that that is all right, “You can do business along that line and be within the law,” they will tell you that it has invariably confronted them in a way that made it practically impossible to enforce the law.

A similar subject was being considered by a House committee when I happened to be a humble Member of that House, and then Attorney General Mitchell appeared before the committee and he objected to the proposal by which authority was to be vested in the Attorney General or any other person, and he said he knew of no instance where anybody under the guise of governmental authority had told anybody that they could do thus and so, and if a man was then indicted in the courts for doing that, or something which a jury could be made to believe was tantamount to it, there was simply no chance of conviction.

Mr. FRANK. Isn't there a distinction, Judge Davis, between such an ex parte presentation as you have referred to and a totally different device where, upon full notice and hearing and opportunity for all persons in the industry or representing the public or in any manner interested to appear and present evidence, an administrative tribunal in such circumstances would be vested with the power to say to the citizen, “Upon the basis of the facts as you set them forth you may proceed lawfully. If, however, you deviate from the pattern of conduct set forth, then you will not be within the terms of this administrative ruling.”

Now with an exploration of that kind at a public hearing, after the fullest kind of investigation of all the facts, such an investigation as the Federal Trade Commission now conducts with reference to suspected violations of law, would not the difficulties to which you have referred, of informal, casual, ex parte determinations disappear?

Mr. DAVIS. Well, now, in the case of members of industry or a member of industry on one side, and nobody except the public on the other, which is generally the case in the case of monopolistic or restraint cases, how often do representatives of the public appear, even if you give notice to the world? How often do they appear, especially people who are familiar enough with the situation or who could, no matter how much they desired, present the other side and present the pitfalls?

Mr. FRANK. Well, the Commission staff itself is frequently fully familiar, or can make itself fully familiar, with all the detailed facts as to the industry.

I don't want to make the ears of the Commission burn, but I think their accomplishments are well known and no one has ever ventured

to say that when they examine into the practices of an industry they do not know virtually everything that there is to be known. If that can be done after the fact, why can it not be done before the fact and why could not a problem be presented as to whether proposed conduct would be within the terms of the statute?

Of course there are those instances which you have referred to, where the answer is so obviously "yes" or so obviously "no" that no one could have any doubt, but may there not be circumstances where there is doubt, where it would be well, in the interest of expediting industry, in which we are all interested, to allow the citizen to act with knowledge that he is not violating the law?

I know from my personal experience as a lawyer it is extremely difficult in some instances to advise a client as to whether he will be violating the law, and if in uncertainty, he will of course, if he is well advised as to his own welfare, refuse to act, and may that not be in many instances an undesirable impediment to the advancement of industry?

Mr. DAVIS. I can readily see why it would be a most desirable thing if we could all look into the future and see these things, but the Federal Trade Commission invariably makes a full, careful, unbiased investigation in the first instance before it ever issues a complaint.

Mr. FRANK. That isn't my point, Judge Davis. I am not in any manner criticizing the Trade Commission. I gravely doubt whether the Commission has the power to advise in the manner that I have indicated.

Mr. DAVIS. Of course it hasn't.

Mr. FRANK. But what I am suggesting is, should not this committee consider whether it wouldn't be advisable to recommend to Congress that there be enacted legislation by which, after notice of hearing and full investigation by the Commission, the Commission should be empowered to advise businessmen whether or no they may proceed as not in violation of the statutes which are under the jurisdiction of the Commission?

Mr. DAVIS. Do you think that the Federal Trade Commission should be vested with authority which Congress can vest in no court?

Mr. FRANK. There are many powers vested in administrative bodies which Congress can invest in no court. I can point to the daily conduct of the Commission on which I happen at the moment to be serving. We have powers that could not constitutionally be vested in any court. The Bureau of Internal Revenue I think to a limited extent—my colleague¹ here can advise better than I can—already is given the power to make such advance determinations. No Federal court, except perhaps courts in the District of Columbia, could make them because the constitutional provision prohibits such judicial adjudications in the absence of a case or controversy. So it isn't a constitutional question, it is a question of expediency, of policy, of desirability—a policy as I have suggested that has already been adopted in certain instances by Congress in other fields.

Mr. DAVIS. We would be very glad to have you or anyone else, Commissioner Frank, submit any Supreme Court decisions which will indicate that the Federal Trade Commission or any other tribunal can be clothed with authority by the Congress to pass upon any

¹ Refers to Mr. Joseph J. O'Connell, Jr., member of the Committee representing the Treasury Department.

matter, and their decision be binding, that does not involve an actual controversy or a case.

Mr. FRANK. I wouldn't presume to do so, but I would like to refer to several writings which might be incorporated in the record by our honored and deceased colleague, Mr. Oliphant. He was very much interested in that subject and he wrote an article in the American Bar Association Journal about 3 years ago.

Senator KING. The two matters to which I am about to call attention may not be in line with the views just suggested by Judge Davis, but it seems to me there is a sort of analogy between the two cases to which I am about to refer. The Judge knows that we have laws respecting tariff duties.

Recently the followers of a certain pastor in Pennsylvania built a church and it was desired by the members of the church to have rich vestments from Holland. They applied to the representative of the Treasury Department as to the tariff duty and were told that it was, as I recall, \$12,000. Thereupon they purchased these vestments to place in their church and when they were brought to the United States, the duty imposed was \$20,000. Well, it seemed to me when that was brought to my attention, that was so unfair and so unjust that I, in conference with Mr. Oliphant drafted a bill under the terms of which persons desiring to import commodities may furnish the Treasury Department with full and complete knowledge, hearing may be had if desired, and thereupon after that presentation the Department may make a ruling as to the tariff duty which will be exacted. Then the purchases are made abroad. In the meantime, the importer makes his contacts with persons in the United States who desire those commodities and he makes his commitments based upon the tariff which he is expected to pay, and under the terms of that act the Government may not renege, to use the language of the street; it is bound by its decision, and the result has been very satisfactory. It has encouraged imports and it has avoided litigation.

Now we have a committee set up by the Senate and by the House, a joint committee on internal revenue tax, and when controversies arise regarding refunds, they are referred to this committee and our decision is a finality. We are an administrative body in a sense, and yet we make that decision and the Government is bound, and of course the taxpayer is bound.

Mr. FRANK. Mr. Chairman, I want to withdraw the suggestion I made about incorporating Mr. Oliphant's study in the record, for I have been advised by Mr. Henderson that the Treasury Department is making a study of the pros and cons of the entire question as to determinations of that character.

The CHAIRMAN. Yes; that is a question which is under consideration and which may be presented at the proper time, when it may be fully examined from both sides.

If there is no objection on the part of any member of the committee, I shall ask leave to print in the record at this point, at the conclusion of Mr. Kelley's remarks today, the address of President Wilson to the Congress in January 1914. It seems to be altogether germane to the subject of our discussion during the past few days.

(The address of President Wilson was marked "Exhibit No. 309" and is included in the appendix on p. 2174.)

The CHAIRMAN. Mr. Kelley, it is now 10 minutes after 4. You were requested by one of the members to discuss Section 8, I believe. I have another meeting this afternoon and if you would be good enough to take that up in the morning, would it be convenient for you?

Mr. KELLEY. Yes, I will be glad to. I will use only a few minutes, but I will be glad to.

The CHAIRMAN. I didn't know how long you wanted to take.

Mr. KELLEY. It may take 15 or 20 minutes.

The CHAIRMAN. Then I would prefer to have the matter go over until tomorrow.¹

The committee then will stand in recess until 10 o'clock tomorrow morning.

(Whereupon, at 4:10 p. m., a recess was taken until Friday, Mar. 3, 1939, at 10 a. m.)

¹ Mr. Kelley's testimony on section 8 appears *infra*, p. 1813 et seq.

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

FRIDAY, MARCH 3, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:30 a. m., pursuant to adjournment on Thursday, March 2, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney, presiding.

Present: Senators O'Mahoney (chairman) and King; Representatives Reece and Williams; Messrs. Thorp, Henderson, Davis, Berge, O'Connell, Frank, Hinrichs, J. B. Wyckoff, representing Department of Commerce, and Edwin Martin, representing Department of Labor.

Present also: Federal Trade Commissioners William A. Ayres and Charles H. March; Willis J. Ballinger, director of studies and economic adviser, Federal Trade Commission; William T. Kelley, Chief Counsel; Joseph E. Sheehy, Assistant Chief Examiner; Col. William T. Chantland, Dr. Robert B. Dawkins, Peadar B. Morehouse, attorneys; Dr. George A. Stephens, Chief Statistician; Dr. Francis Walker, Chief Economist; Col. William H. England, Assistant Chief Economist.

The CHAIRMAN. The committee will please come to order.

It had been our plan to have Mr. Kelley proceed this morning to respond to an inquiry that was made yesterday afternoon by Congressman Reece. In the absence of the Congressman, who is necessarily detained, it has seemed desirable to suspend Mr. Kelley's response, and we shall proceed, therefore, with the next witness, and at the conclusion of his testimony, if Congressman Reece has arrived we will recall Mr. Kelley to the stand to discuss section 8.

Who is the next witness, Mr. Ballinger?

Mr. BALLINGER. The next witness is Mr. Joseph Sheehy, Assistant Chief Examiner of the Commission. Mr. Sheehy will discuss the monopolistic practices uncovered by the investigations authorized by Congress in the last 7 years.

The CHAIRMAN. Do you want him sworn, Mr. Ballinger?

Mr. BALLINGER. Yes.

The CHAIRMAN. Do you solemnly swear the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. SHEEHY. I do.

TESTIMONY OF JOSEPH SHEEHY, ASSISTANT CHIEF EXAMINER, FEDERAL TRADE COMMISSION, WASHINGTON, D. C.

Mr. BALLINGER. State your name for the record.

Mr. SHEEHY. Joseph E. Sheehy, Assistant Chief Examiner.

Mr. BALLINGER. How long have you been with the Federal Trade Commission?

Mr. SHEEHY. I have been with the Federal Trade Commission since January 1925.

Mr. BALLINGER. Any further questions, Mr. Chairman?

The CHAIRMAN. You are a lawyer?

Mr. SHEEHY. Yes, sir.

The CHAIRMAN. Appointed to the law staff at that time?

Mr. SHEEHY. I was appointed as attorney-examiner in the investigation.

The CHAIRMAN. What is your position now?

Mr. SHEEHY. Assistant Chief Examiner.

The CHAIRMAN. You have been with the Federal Trade Commission for approximately 14 years?

Mr. SHEEHY. That is correct, sir.

SECTION 6 OF THE FEDERAL TRADE COMMISSION ACT

Mr. SHEEHY. Among the powers granted to the Federal Trade Commission under section 6 of its organic act are the following:

1. To gather and compile information concerning, and to investigate from time to time, the organization, business conduct, practices, and management of any corporation engaged in commerce except in banks and common carriers subject to the act to regulate commerce, and its relation to other corporations and to individuals, and associations, and partnerships.

2. Whenever a final decree has been entered against any defendant corporation in any suit brought by the United States, to prevent and restrain any violation of the Antitrust Act, to make investigation upon its own initiative of the manner in which the decree has been or is being carried out, and upon the application of the Attorney General, it shall be its duty to make such investigation. It shall transmit to the Attorney General a report embodying its findings and recommendations as a result of any such investigation, and the report shall be made public in the discretion of the Commission.

3. Upon the direction of the President or either House of Congress, to investigate and report the facts relating to any alleged violations of the antitrust acts by any corporation.

Under the authority of this section the Federal Trade Commission has conducted more than 100 general inquiries or studies. Most of these were made in pursuance of Congressional resolution, although many have been conducted pursuant to Presidential orders, at the request of the Attorney General, or on the Commission's initiative.

Many of these inquiries have supplied valuable information bearing on competitive conditions and trends in interstate trade and industrial development, and have shown the need for and wisdom of legislative or other corrective action.

Copies of several of these reports will be submitted as exhibits. They have been summarized briefly in the report already filed with this committee yesterday.

At this time we desire to present brief summaries of a few reports covering important investigations made by the Federal Trade Commission in response to the direction of the Congress. The first of these deals with the Commission's report on chain stores, and will be presented by Dr. Francis Walker, Chief Economist of the Federal Trade Commission. Dr. Walker.

The CHAIRMAN. Do you solemnly swear the testimony you are about to give will be the truth, the whole truth and nothing but the truth, so help you God?

Dr. WALKER. I do.

**TESTIMONY OF DR. FRANCIS WALKER, CHIEF ECONOMIST,
FEDERAL TRADE COMMISSION, WASHINGTON, D. C.**

Mr. BALLINGER. State your name for the record.

Dr. WALKER. Francis Walker.

Mr. BALLINGER. What is your present position on the Federal Trade Commission?

Dr. WALKER. Chief economist.

Mr. BALLINGER. How long have you been chief economist with the Federal Trade Commission?

Dr. WALKER. Since the organization of the Commission.

Mr. BALLINGER. You had general supervision of the chain-store inquiry?

Dr. WALKER. Yes.

The CHAIRMAN. Were you not in the service of the Government before the Federal Trade Commission was established?

Dr. WALKER. Yes, sir; I was with the Bureau of Corporations.

The CHAIRMAN. And how long had you been with that Bureau?

Dr. WALKER. I entered the service on March 1, 1904.

The CHAIRMAN. Were you a civil-service employee at the beginning?

Dr. WALKER. I was by exception of the President. I was the Deputy Commissioner when the Bureau of Corporations was incorporated in the Federal Trade Commission.

The CHAIRMAN. Your service, Dr. Walker, exceeds that of most Members of Congress.

You may proceed, please.

CHAIN STORE STUDY

Dr. WALKER. The study I am to report on deals with the chain stores, and a short statement has been prepared regarding it which I will read.

On May 12, 1928, the United States Senate, through Senate Resolution No. 224, Seventieth Congress, first session, directed that the Federal Trade Commission to—

undertake an inquiry into the chain-store system of marketing and distribution as conducted by manufacturing, wholesaling, retailing, or other types of chain stores and to ascertain and report to the Senate (1) the extent to which such consolidations have been effected in violation of the antitrust laws, if at all; (2) the extent to which consolidations or combinations of such organizations are susceptible to regulation under the Federal Trade Commission Act or the antitrust laws, if at all; and (3) what legislation, if any, should be enacted for the purpose of regulating and controlling chain-store distribution.

In response to this resolution a detailed investigation was made, which included the use of both questionnaires and field agents. The data procured in this manner were assembled and transmitted to the Senate in 33 factual reports, covering various phases of chain-store operation. Each of these was printed as a Senate document.

I may state that these five volumes [pointing] comprise the reports referred to and contain also the final report which was issued some-

what later. The original 34 reports were in separate issues made as rapidly as they could be prepared and, in binding the report in this form, the material was organized on the basis of the subject matter rather than in the order of chronology of issue, and I think it may be convenient, therefore, for the purposes of references for the committee, to give in addition to the regular citation the order in which they appear, thereby making them more readily found in these volumes.

The total number of pages in the report is about 2,700. The titles and citations are as follows—

The CHAIRMAN. Dr. Walker, in order to save your time, may I suggest that this list may be printed in the record at this point as part of your presentation and it will be unnecessary for you to read it.

(The list of titles was marked "Exhibit No. 310" and is included in the appendix on p. 2177.)

Dr. WALKER. On December 14, 1934, the Commission transmitted to the Senate its final report on the chain-store investigation, covering approximately 100 printed pages, in which it summarized the facts and presented its conclusions and recommendations based upon the factual data obtained during the inquiry.

The study indicated that the chief advantage enjoyed by the chain store was its lower selling prices to consumers. These were attributable to a variety of factors, chief among which were special discounts and allowances to chains, use of loss leaders and, in some localities, the more extensive use of short and less extensive use of overweighing by chains as compared with independents. Among other factors contributing to lower prices by the chains were less service to customers, lower wages in some localities, elimination of wholesale selling expense, handling of private brands upon which there were wider profit margins, profits from wholesaling, ability to use newspaper advertising profitably, and the advantage of being able to average the profit results obtained from stores in various localities.

The Commission discussed, but did not recommend, certain proposals, including the graduated chain-store tax, exemption of co-operatives from the operation of the antitrust laws and from taxation, and the suggestion that manufacturers might be requested to file with the Commission special prices or discounts to chain stores. The Commission, in its final report on the chain-store investigation, made the following statement with regard to recommendations for legislation:

If the public policy thought to have been expressed in section 7 of the Clayton Act is to be revived and pursued to any real accomplishment, it is obvious that the act requires substantial amendment. The amendments indicated under the circumstances fall into two categories: First, such as would make section 7 effective to the extent of its original intent; second, such as would extend it beyond its original intent in order to make it a more effective obstacle to the trend toward monopoly. If the first course be adopted, it could be accomplished by an amendment of section 11 authorizing the Commission to order the divestiture of physical assets acquired as the result of an unlawful stock acquisition and regardless of whether complaint is filed before or after the assets are acquired. Such an amendment would restore to the section something of its supposed original intent and effectiveness and would but establish what a strong minority of the Supreme Court on several occasions have stated is already a correct interpretation of the law. The Commission recommends such amendment in the event its recommendation for amendment of section 7 is not acceptable.

The fact that important consolidations of competing corporations have been consummated through acquisition of physical properties rather than stock suggests the second type of amendment. To the extent that acquisition or consolidation

of assets tends to create monopoly or substantially lessen competition it might logically be prohibited to the same extent that stock acquisitions and consolidations are prohibited and on the same grounds.

Section 7 now declares that stock acquisitions are unlawful—

where the effect of such acquisition may be to substantially lessen competition *between the corporation whose stock is so acquired and the corporation making the acquisition*, or to restrain such commerce in any section or community, or tend to create a monopoly of any line of commerce.

A vital part of the section is in the words above italicized. As previously quoted from the opinion of one of the Federal circuit courts of appeal—

if competing corporations may not consolidate, it naturally follows that it will be difficult for one corporation ever to monopolize an industry.

The CHAIRMAN. Of course, Dr. Walker, the criticism which is made of suggestions of this kind is chiefly that legislation of the character suggested, unless very carefully drafted, might have the result of actually hindering the growth of the country. It is pointed out that the rapid improvement in the last 20 years of the means of communication and transportation has brought the country closer together. We all know that not only the Nation but the world is very much smaller today than it was even 10 years ago. Airplanes and radio and wireless telephony and all of the various inventions which have marked the last decade have tended to do away with the geographical divisions so it is urged that corporations ought to be bigger to meet that, so there is always the difference in mere size and monopolistic practices. Is that a correct statement of the situation as it has been presented to you from time to time?

Dr. WALKER. As a personal opinion, I would say that you have stated the problem. As to the answer, I think opinions would be various, and it would require a balancing of different advantages and disadvantages from the procedure proposed.

The CHAIRMAN. Business has become more and more national in scope, and any attempt to return business to the local boundaries that obtained at the time before these advantages from invention became available would tend to turn back the clock of economic progress, would it not?

Dr. WALKER. I don't see that such legislation as the Commission proposed would turn back the clock. It might halt and delay some developments that, if they were sporadic and didn't extend too far, might not be objectionable; it might save in some cases the construction of new plant and facilities.

The CHAIRMAN. Your feeling, therefore, is that the legislation should be directed against monopolistic practices, but should not be directed against normal expansion or normal growth which is the result of purely legitimate effort.

Dr. WALKER. Well, if you say that normal expansion, as some people say, is an expansion from within, then there could be no possible objection, but then some would question whether an expansion by acquiring a competitor was a normal expansion. We have examples in this country of very large organizations, with tremendous investments of capital and a great volume of business, that have grown by themselves.

The CHAIRMAN. Of course, section 7 depends wholly upon the interpretation which is to be given by the Trade Commission or the courts to the phrase "substantially lessening competition."

Dr. WALKER. That is right.

The CHAIRMAN. So that what may be a substantial lessening of competition in one decade may not be a lessening of competition at all in a succeeding decade.

Dr. WALKER. Quite true.

The CHAIRMAN. So that you have a changing standard which is not based upon any law of Congress, but is controlled solely by the discretion of the persons who enforce the law.

Dr. WALKER. Well, it might be that you could meet the gradual and steady growth of the country regarding the limitation as one that had reference to proportion, rather than absolute volume or quantity, and conditions of competition, and to that extent there would be no special need of a new approach by the Commission or other authority.

The CHAIRMAN. Have you, as chief economist of the Federal Trade Commission, at any time suggested this rule of proportion as being one that ought to be adopted?

Dr. WALKER. I think the rule of proportion is one that has been very largely adopted by those who have dealt with these subjects, and in the actual cases before the Commission with which I have had only casual concern. I think most economists would apply automatically, almost, the rule of proportion, to state it crudely not in definite percentages, but to take account of the relative volume of the whole trade and the part that was proposed to be consolidated, and the particular circumstances, also, that might effect a particular consolidation with a certain proportion, and another without. Here might be a concern, for example, such as was suggested by members of the honorable committee yesterday, where certain consolidations would have been economical and might quite readily, in my idea of the Commission's attitude under these matters, have been acquitted as not substantially lessening competition or being in any way against the public interest.

I refer to Senator King's remark about a certain mining company that couldn't make any money, but if they could make a crosscut and save making a new shaft, they might have both worked on a profitable basis.

The CHAIRMAN. That, of course, was an instance in which the proportion of the entire mining industry controlled by the two after the merger was infinitesimal. We are discussing, I think, rather the cases where a substantial proportion of an industry is brought into consolidation or merger.

Dr. WALKER. I think that "substantial" is relative, and if it is substantial in the relative sense, then I think the Commission is bound by the terms of the statute, and I think broadly speaking the statute is a proper provision of law.

The CHAIRMAN. The matter which you have just suggested might easily result in allowing one merger of A, B, and C to control, let us say, for the purposes of illustration, 60 percent of an industry, while in another industry E, F, and G would be denied the right to control more than 50 percent.

Dr. WALKER. I would say both would be out.

The CHAIRMAN. Well, then, in your judgment, what would be the percentage?

Dr. WALKER. That is a matter that I think should fluctuate somewhat.

The CHAIRMAN. That is exactly the point that I am making. You are urging a fluctuating standard, not only from year to year but in the same year with relation to different industries.

Dr. WALKER. I will qualify that, maybe, this way: It should fluctuate ideally. Practically it may be desirable to fix it. Such suggestions have been made; for example, there is the famous suggestion of 30 percent. I wouldn't regard any definite suggestion of that kind as being ideal. It might be practical. That depends on the necessities of the situation politically and economically. Under certain conditions there might be no problem in any case whatever.

The CHAIRMAN. The reason I have asked these questions is merely to illustrate what I conceive to be the nubbin of this problem. I have always been rather inclined to believe that the most desirable rule of legislation is one which would definitely state, in the law, just what can or cannot be done so that there is no excuse for uncertainty and so that there may be no reason for businessmen to apply to any particular board for permission to do this or to do that.

Dr. WALKER. I would like that better myself.

The CHAIRMAN. I am sorry to have interrupted you so long.

Dr. WALKER. No, I think this is a more perfunctory matter.

I just spoke of a passage in an opinion of a Federal court regarding section 7 of the Clayton Act which was commented on by the Federal Trade Commission in its final report on chain stores. It made there a further statement as follows:

Unless that portion of the section be made effective, the remaining effects prohibited may be interpreted as substantially equivalent to those forbidden by the Sherman Act, though the words "may be" and "tend to create" import a different intention on the part of Congress which the courts have previously recognized. The theory that size and power alone do not constitute monopoly under the Sherman Act seems bound, however, to affect interpretation of another statute aimed at tendency toward monopoly, on the legal doctrine of *pari materia*.

The Supreme Court seems to narrow construction of the word "competition" between the acquiring and the acquired corporation. In *International Shoe Co. v. Federal Trade Commission* (280 U. S. 291) the Court held that the competition between the corporations must be substantial and that the act deals only with such acquisitions as probably will result in lessening competition to a substantial degree. This last decision may possibly be interpreted to make the effect on competition in general the test and not the effect on competition between the two corporations. The Court also, in its requirement of substantial competition, incidentally held that the competition must be actual as distinguished from potential. However, in numerous other cases, construing laws against monopoly and restraint of trade, the courts have held potential competition a legitimate object of legislative protection.

The CHAIRMAN. Do you conceive, Dr. Walker, that there is any difference between the language of section 7, which uses the phrase "to substantially lessen competition" and the apparent language of the court in this *International Shoe case* which from your statement would seem to be to lessen substantially competition.

Have I made a correct summary of the two expressions?

Dr. WALKER. I have no doubt you have. I am not quite sure that I understand the difference.

The CHAIRMAN. Well, as I listened to you I was impressed by your statement that the Court held in the *International Shoe case* that the

act deals only with such acquisitions as probably will result in lessening competition to a substantial degree. Now I conceive that to mean to lessen substantial competition, whereas the actual language of the act is to substantially lessen competition.

Dr. WALKER. I think that the words of the act might import a slightly different meaning.

The CHAIRMAN. In other words, the language which you have just attributed to the Court is much narrower than the actual language of the act, it seems to me.

Dr. WALKER. Yes; what I am reading is a part of a report of the Commission.

Mr. DAVIS. I think "substantially" applies to both.

Mr. FERGUSON. Substantial competition and substantial lessening.

The CHAIRMAN. I think perhaps I have been dividing the hair betwixt the north and the northwest.

Dr. WALKER. I think one could differ about it.

The CHAIRMAN. The thought just occurred to me as you were proceeding with your discussion, Dr. Walker. I won't pursue the matter.

Dr. WALKER. Several cases are cited which it may not be necessary to repeat here.

The CHAIRMAN. They may be printed in the record.

(The citations not read are as follows:)

U. S. v. Patterson (59 Fed. 280 at 283); *U. S. v. Colgate & Co.* (250 U. S. 300 at 307); *Aluminum Co. of America v. F. T. C.* (284 Fed. 401 at 408); *F. T. C. v. Klesner* (280 U. S. 19 at 28); *F. T. C. v. Raladam Co.* (283 U. S. 643 at 649, and 651).

Dr. WALKER. The Commission continued:

We respectfully recommend amendments to sections 7 and 11 of the Clayton Act as follows:

1. That the first two paragraphs of section 7 be amended to read:

"That no corporation engaged in commerce shall acquire, directly or indirectly, the whole, or a controlling interest in the voting stock or other share capital or the whole of, or a major part of the assets of another corporation engaged also in commerce and in competition with the acquiring corporation.

"No corporation engaged in commerce shall acquire, directly or indirectly, any part of the stock or other share capital or any part of the assets of another corporation engaged also in commerce where the effect of such acquisition may be to substantially lessen competition between the corporation whose stock or assets is so acquired and the corporation making the acquisition, or to restrain such commerce in any section or community or tend to create a monopoly of any line of commerce.

"No corporation shall acquire, by merger, consolidation, or otherwise, directly or indirectly, the whole of, or a controlling interest in the voting stock or other share capital, or the whole of, or a major part of the assets of two or more corporations engaged also in commerce and in competition with each other.

"That no corporation shall acquire, by merger, consolidation, or otherwise, directly or indirectly, any part of the stock or other share capital or any part of the assets of two or more corporations engaged in commerce where the effect of such acquisition, or of the use of such stock by the voting or granting of proxies or otherwise, may be to substantially lessen competition between such corporations, or any of them, whose stock or other share capital or assets is so acquired, or to restrain such commerce in any section or community or tend to create a monopoly of any line of commerce."

2. That there be inserted as the fifth paragraph of section 7 the following:

"After the issuance of a complaint charging a corporation with having violated the provisions of paragraphs 1, 2, 3, or 4 of this section, as amended, and prior to the dismissal of such complaint or the entry of an order as provided for in Section 11 of this Act, no other corporation shall acquire from such corporation all or any part of the capital stock or assets charged in such complaint to have been acquired in violation of paragraphs 1, 2, 3, or 4 of this section as amended."

3. That the second paragraph of section 11 be amended by inserting in the twenty-first line thereof after the word "stock" the words "or assets."

In the discussion of the legal status of special prices to chain stores by manufacturers (ch. IV, sec. 4) the uncertainties and difficulties of enforcing section 2 of the Clayton Act were pointed out at some length. The conclusion was reached that most of those uncertainties and difficulties grew out of the various provisos which narrowed the scope of the original prohibition to an indeterminate degree. A simple solution for the uncertainties and difficulties of enforcement would be to prohibit unfair and unjust discrimination in price and leave it to the enforcement agency, subject to review by the courts, to apply that principle to particular cases and situations. The soundness of and extent to which the present provisos would constitute valid defenses would thus become a judicial and not a legislative matter.

The Commission therefore recommends that section 2 of the Clayton Act be amended to read as follows:

"It shall be unlawful for any person engaged in commerce, in any transaction in or affecting such commerce, either directly or indirectly to discriminate unfairly or unjustly in price between different purchasers of commodities, which commodities are sold for use, consumption, or resale within the United States or any Territory thereof or the District of Columbia or any insular possession or other place under the jurisdiction of the United States."

In the discussion of the legal status of special prices to chain stores by manufacturers (ch. IV, sec. 4) it was also stated that unless the price discrimination permitted "on account of" quantity shall make "only due allowance" therefor, section 2 of the Clayton Act may be readily evaded by making a small difference in quantity the occasion for a large difference in price. If the section is to have any vitality it must either be interpreted and enforced to that effect or it should be amended to that effect.

The Commission further recommends that at the end of section 11 a new paragraph be added to read as follows:

"If any clause, sentence, paragraph, or part of the amendments herein contained to sections 2, 7, or 11 of this Act shall, for any reason, be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder of said separate and several amendments to said sections, but shall be confined in its operation to the clause, sentence, paragraph, or part of said separate and several amendments to said sections directly involved in the controversy in which such judgment shall have been rendered."

A recommendation for amendment of the Federal Trade Commission Act seems essential as shown by results of the chain-store investigation; namely, first, that the prohibition of unfair methods of competition in section 5 of the act be broadened so as to include unfair or deceptive acts and practices in interstate commerce, and, second, so that unfair methods, acts, and practices may be reached when they unfairly affect interstate commerce, regardless of whether the offender is engaged in commerce or the acts are done in the course of commerce.

Wherefore, we respectfully recommend that the first two paragraphs of section 5 of the Federal Trade Commission Act be amended so as to read as follows:

"Unfair methods of competition in or affecting commerce and unfair or deceptive acts and practices in or affecting commerce are declared unlawful.

"The Commission is empowered and directed to prevent persons, partnerships, or corporations, except banks and common carriers subject to the acts to regulate commerce, from using unfair methods of competition in or affecting commerce and unfair or deceptive acts and practices in or affecting commerce."

The Commission is giving consideration to still other amendments of its organic act and of other statutory provisions committed to it for enforcement, but since these do not grow out of the chain-store investigation as such they are reserved for presentation in another connection.

That is the end of the Commission's statement for this record.

Amendments to section 2 of the Clayton Act and section 5 of the Federal Trade Commission Act have already covered, in large part, two of these recommendations.

Copies of the Commission's reports on chain stores, consisting of five volumes, are transmitted as F. T. C. exhibits 195-A to 195-E, inclusive. The conclusions and recommendations are contained in chapter VII of the final report which appears in volume V.

The CHAIRMAN. The exhibits may be received as part of the records of the committee.

(The five volumes referred to were marked "Exhibits Nos. 311 to 315" and are on file with the committee.)

Mr. FRANK. Will they be printed, Mr. Chairman?

The CHAIRMAN. No.

Do any members of the committee desire to ask Dr. Walker a question?

Mr. O'CONNELL. Is the amendment to sections 2 and 5, particularly 5, of the Federal Trade Commission Act what is generally known as the Robinson-Patman Act?

Dr. WALKER. The one to section 5?

Mr. O'CONNELL. Yes.

Dr. WALKER. The amendment to section 5——

Mr. DAVIS (interposing). The Wheeler-Lea amendment is generally referred to. The Robinson-Patman Act refers to the amendment to section 2 of the Clayton Act, and also some other matters.

Mr. O'CONNELL. Would you say that the Robinson-Patman Act grew out of or at least followed the chain-store investigation made by the Federal Trade Commission?

Mr. DAVIS. Did I understand you asked about the Robinson-Patman Act?

The CHAIRMAN. Did it grow out of the investigation?

Mr. DAVIS. Oh, yes; I think undoubtedly that; and it followed in remarkably close detail the findings and the conclusions of the Commission in the case against the Goodyear Rubber & Tire Co., involving a contract they had with Sears, Roebuck & Co.

Prior to that there was very considerable difference of opinion as to the interpretation of the old section 2 of the Clayton Act which was directed against discrimination in price, but there had always been a very great controversy as to just what was meant by it. As a matter of fact, it probably was ambiguous, but the interpretation placed upon the act by the Commission in the *Goodyear case* was crystalized into a given legislative approval by the Robinson-Patman Act.

Mr. O'CONNELL. Would it be fair to say that the Robinson-Patman Act is an act which does not contain any particular standards for determining the legality, or rather the illegality of the prohibited practices, and that it is the position of the Commission that the determination of the illegality of any particular practices under that section is a judicial and not a legislative or administrative matter? On page 6 of the statement that Dr. Walker was reading there is a sentence to the effect that the soundness and the extent to which the present provisos would constitute valid defenses would thus become a judicial and not a legislative matter. I may not have made myself clear. What I had in mind was that it is my impression that the Robinson-Patman Act prohibits certain practices—price discrimination and that sort of thing—but without expressing in detail or setting up any particular standards for determining whether or not a particular type of practice is discriminatory under that act; and it was also my impression that it is the position of the Commission that the determination of whether or not a particular type of conduct is in violation of the Robinson-Patman Act is and should be purely a judicial matter rather than something that could be dealt with by the administrative agency.

Mr. DAVIS. Well, in addition to the general inhibition, the Robinson-Patman Act embraces certain presumptions and certain defenses or justifications and, in effect, makes certain exceptions in its determinations; but in the final analysis, of course, it is for the Commission to determine upon the facts and circumstances and the effects in each case whether or not there is in a given case a violation; in other words, as to whether the respondent has discriminated against some of us customers or in favor of others with injurious effects, and if he has done that without one of the justifications that are provided in the act, why, of course, that constitutes a violation.

It is rather fully defined in many respects but in general terms.

The CHAIRMAN. The answer is probably confirmed in the terms of section 2 itself, as amended by the so-called Robinson-Patman Act. There we find exactly the same situation to which I was referring a short while ago in discussing with Dr. Walker section 7 and the language of section 7 which, as you will remember, was a prohibition against the acquisition of stock where the acquisition would tend to substantially lessen competition. Now that seems to be the guide in the Robinson-Patman Act because the Federal Trade Commission must find that the discrimination, the alleged discrimination, is such that its effect may be—

substantially to lessen competition or tend to create a monopoly in any line of commerce or to injure, destroy, or prevent competition with any person who either grants or knowingly receives the benefit of such discrimination.

Obviously, there is no definite standard and it imposes upon the Trade Commission the responsibility as well as the duty of determining whether or not the particular act alleged has any of the effects outlined in that language. That, I suppose, is what you mean by a judicial determination.

Mr. O'CONNELL. It seemed to me it also imposed a duty on the part of industry and businessmen of determining at their peril without any particular understanding as to what the particular type of conduct was that was intended to be touched by this act, what they should or should not do. I was merely raising the question without any intention of pursuing it at any length as to whether it was not the fact that section 2 and section 7 also are rather difficult for a business man to understand before he does something which may subject him to prosecution for having done it.

Mr. DAVIS. Do you not think that it is a relatively simple matter for a member of industry who is thoroughly familiar with all of his own affairs and his own customers' to know whether or not he is treating all of his customers alike under like circumstances? Do you not think that is a very simple matter?

Mr. O'CONNELL. Even assuming that he knew all you assume, I do not believe it would be simple for him to know.

Mr. DAVIS. Well, I will tell you, our experience has been and our observations are that out of the thousands of members of industry who have come to the Commission in order to get their bearings, the overwhelming percentage of them have done so and have gone away apparently perfectly satisfied that they know how to and have proceeded to comply with the law.

The CHAIRMAN. Did they receive helpful suggestions from the Trade Commission?

Mr. DAVIS. From our staff. In that connection, Senator, as it was a new law, the Commission took the liberty and the responsibility of establishing a committee of some of its best lawyers and economists and accountants who had permission to informally discuss the problems with the innumerable members of industry who were pouring in there to try to get their bearings, and right in that connection, for several weeks, I think, the Secretary reported to us we received an average of 400 letters a day, making inquiry about the Robinson-Patman Act, and so forth. So we authorized this committee to be as helpful as they could, not to get out on a limb or in deep water, because it was new to everybody and in the final analysis the courts had their say as to interpretation and, in addition, the Department of Justice had concurrent jurisdiction, and we had to proceed carefully and cautiously. But the point that I wish to make is this. Although they were told that these conferences were informal, they were not binding on the Commission upon a subsequent trial, upon the actual evidence or upon the court or upon the Department of Justice or anybody else, yet they were the best judgment of those trained experts of the Commission as to what would be a proper application of this law in a given instance. Now, although at first there was a tremendous amount of confusion and a large number of lawyers and economists and others were writing articles and debating the question as to what was meant and what wasn't and what could be done and what couldn't be done, which still further confused the situation because most of them making these speeches and writing these articles didn't know any too much about it, and so there was a tremendous amount of confusion, but that finally disappeared and most everybody got their bearings and there has been, we think, a remarkable compliance on the whole on the part of industry with the act. They adjusted their discounts, their methods of doing business, and all of that, and had no serious difficulty in doing so if their purpose was to comply, but the fellows who were going away dissatisfied and the fellows whom you hear constantly complaining are not the ones who wanted to find out how to comply with the law, but they wanted to know just how near the precipice they can drive without falling over, or they wanted to know how they can run through the law and get by with it; they wanted an absolution in advance. Now that is our experience in the light of a tremendous amount of conferences.

Mr. O'CONNELL. I should hate to suggest that that group you speak of includes a substantial number of the business community, but it is entirely possible. Certainly this type of legislation anticipates that there will be people who are not entirely willing to live up to a very, let us say, high moral conduct in the business community. But getting away from that, I have been under the impression—I am apparently wrong from what you say—that there is still quite a bit of difference of opinion among various people as to what the various provisions of the Robinson-Patman Act mean, and it will probably take a series of opinions of the Supreme Court to establish that.

Mr. DAVIS. That is perfectly true—a question of interpretation of language. Therefore, what the Commission went ahead to do was this: As the facts were presented it issued complaints, after investigation and upon showing, in order to get an opinion, an interpretation

of all the various different controversial phases of the act. Different things were raised in order to get test cases. Those things have either been tried or are in course of trial; and then some of them have been appealed. The Supreme Court has passed upon only one, and that involved the brokerage section, and they affirmed the Commission.

When these various changes that are in the bill shall have been fully determined it will clear up most of the questions as to which there is any legal or economic controversy, but until that is done, I don't think there is any person on earth, the Federal Trade Commission or anybody acting for it or anybody else, that can give a final opinion, because under the law the Supreme Court of the United States, or at least circuit courts of appeal, are the ones clothed with authority to give final opinions, and for the Commission to undertake, upon a new question, a question of first impression which has not been passed upon by the courts, to give any dogmatic opinion except in the course of its procedure under the statutes, would simply be just as apt to mislead a member of the industry as it would to help him.

Mr. O'CONNELL. Judge Davis, I never had any question but what the law was such that it did require a decision by the circuit court of appeals or the Supreme Court before anyone would know what any particular provision of that act means. I was only wanting to make clear, to my own mind at least, that that was what the act or law provides.

The CHAIRMAN. May I suggest that Mr. Kelley has had the aspect, for the last 3 minutes, of a man who desired to make a contribution to this discussion. Did I judge your look correctly, Mr. Kelley?

Mr. KELLEY. With reference to the Patman Act, it has certainly given the Commission considerable thought for study, and perhaps business too, but the act is in various parts. Take, for instance, the section with respect to brokers. We have a case against A. & P., the Atlantic & Pacific Tea Co., now pending in court. We won one in the second court; we have another pending in the Richmond circuit. Ultimately that section will go to the Supreme Court of the United States, and until then I don't know that we will know exactly where we are at.

But there are other difficult provisions in the law. But we were talking here about price discrimination. Now we haven't had a case reach the court on price discrimination under this Robinson-Patman Act, and I doubt that we will have any. I don't think that that is particularly different. I think there is a little difference between section 7 and section 2 of the Clayton Act with respect to this "substantially lessening competition." One applies to an involuntary restraint and the other applies to a mutual or voluntary restraint. Where a man discriminates in price between two customers, Congress wrote into the Robinson-Patman Act and its adjudication under the law that if a difference in price is based upon or relatively reasonably related to the difference in cost of selling and service, it is all right. The Patman Act doesn't prohibit doing business on efficiency and service, based upon cost.

But where a man discriminates in price by favoritism to one, and that difference in price isn't based upon cost, efficiency of serving to two customers, but the price to one is in excess of the difference in the difference of cost, then it becomes unlawful if the effect may be

criminations in a competitive market, in the grocery line, sometimes a price of 1 cent or 2 cents will not only have the effect of substantially lessening competition, but will perhaps drive the man out of business.

Business itself is the only one that is informed as to the facts. It knows its costs; it knows whether the differences in price are based upon the difference in the cost and selling and service and efficiency between the two customers. It is up to business to so price its goods that the difference reflects the differences in cost, and it is up to them to ascertain that if there is a difference, even though it be a few cents, whether that will have the effect of enriching one and unjustly injuring the other.

So I say that the problem with administering section 2 is not the law. I don't know how Congress, on that particular section, could have improved the section. The difficulty is inherently in ascertaining all of the facts so that the Commission can properly apply the section.

The CHAIRMAN. Perhaps it would clarify the discussion if I were to ask you, Mr. Kelley, if in your opinion it would be possible for a manufacturer, without intending to make a discrimination against any of his customers, nevertheless to make such a change of prices as would, in the opinion of the Federal Trade Commission in enforcing the Robinson-Patman Act, be a discrimination.

Mr. KELLEY. Yes; that has happened now and again, and frequently in most cases, after we have an informal conference and go over the whole matter, they go back home and adjust their discounts or prices. I don't see—

The CHAIRMAN (interposing). That, of course, raises the question, to what extent these informal discussions of which you speak should be recognized or should be standardized in law. It comes back to the whole discussion which was undertaken yesterday afternoon with respect to the advisability or inadvisability of what is called a declaratory judgments act with respect to the interpretation of a law which uses language which might be characterized as vague rather than explicit.

Mr. KELLEY. The difficulty with that, as applied generally, is that the public interest is to be protected, and you can only protect the public interest by knowing what are the true facts, and you don't get the true facts from ex parte visitors or interested visitors. We can listen to them and we can take what they have to say, but we have to find out what are the true facts and how they affect the public, and from experience we have found that we can only do that by diligently ascertaining them ourselves, and we cannot rely on making rulings on any such propositions as stated to us. And in these informal conferences there is no opinion on our part given.

The CHAIRMAN. Well, in your opinion, Mr. Kelley, based upon your long experience as a member of the law staff of the Federal Trade Commission, is it possible to define clearly, in understandable language, the unfair trade practices and the deceptive methods of competition which ought to be condemned?

Mr. KELLEY. Senator, that needs considerable explanation. It is not susceptible of being answered "Yes" or "No." In the law there are two kinds of practices. One is called voluntary and the other involuntary. The involuntary restraints like boycott or fraud or

false advertising are inherently unfair because they always work in favor of monopoly. Consequently, the law condemns them per se; they have no justification. If we should ascertain that a manufacturer is blacklisting his competitors, that a combination of manufacturers is blacklisting certain dealers, that is unlawful per se. If we find that a manufacturer is making disparaging statements, lying about his competitor's goods, that is unlawful per se. They are inherently unfair; they have no justification. Of course, that kind of practices we have no difficulty with except to detect them, and once we detect them we apply the law. They are unfair, that is all.

The CHAIRMAN. And those fall in the category of which Judge Davis was speaking. The manufacturer or the businessman or the corporation which engages in those practices knows that they are illegal per se.

Mr. KELLEY. Yes; let me speak about these mutual agreements. Mr. Morehouse yesterday or the day before related to you some 59 cases where the Commission made a finding and an order. I dare say to this committee that there wasn't a lawyer representing a company that didn't know that that conduct was unlawful, and I will dare to say that there wasn't a respondent that didn't know that that conduct was unlawful. Why was it unlawful? There were from 75 to 95 of the producers in those industries that agreed among themselves as to a common price. When you have a preponderant size, a combination, that power is sufficient to condemn such an agreement because of its injurious effects upon the public. The business of the United States and the lawyers of the United States know that those kinds of agreements are unlawful; they know just as well as the Government. When we investigate these cases and we issue the complaints and the lawyers come down to our office, what do they come down for? To try to find out what facts we have got, what we know about them, and once they find out that we know the truth they are willing to throw up the sponge. They are not coming down with the proposition: "Oh, we didn't know this was unlawful," or "Is this lawful or is it unlawful?" No! There is only one way to protect the public interest in this country against those monopolies, those combinations, as to which the public is not a party when they are entered into, and that is for the Government to diligently ascertain the facts with respect to them and find them out and when they find them out prohibit them and then put a penalty on them for repeating.

There is too much of this talk that business doesn't know what is lawful and business doesn't know what to do. I say there are some things of doubt, yes; that should be cleared up, but by and large they know what's lawful and what's unlawful. The Commission in 20 years has published its decisions and its orders based upon facts in each case, which should guide them as a precedent, but do they pay any attention to that? No, they don't. Congress when it enacted the Wheeler-Lea put teeth into the Commission's order. They said, that a violation of the Commission's order would be punishable by fine, recoverable in a civil suit by the Department of Justice. Since that law went into effect and those orders have become final we have sent over to the Department of Justice a considerable number of them and they have filed penalty suits, civil suits, and in some cases they have filed criminal actions. I dare say that when those cases are decided and those parties are subject to fine they are going to be mighty

careful in the future, when the Commission issues an order, to obey it, and I think the lawyers will come to a realization for the first time in this country that the Government means business.

What I would like to see is the Federal Trade Commission and the Department of Justice given money adequately to detect these things and let Congress amend the law so as to make things more clear, and plug up the loopholes so we can stop these conspiracies and these monopolies that are making it hard for the public in this country. The whole philosophy back of the antitrust laws is nothing but the dread of the enhancement of prices; that is what they are afraid of. That is what these corporations do—they are in business for profit. From their point of view I don't blame them; they are seeking to increase their own profit.

Where does the public come in? They are not represented at those conferences. Labor is not called in. Somebody must protect labor; somebody must protect the consuming public. If we are going to do that we are going to do it with force and vigor and according to law.

Representative REECE. Judge,¹ you made reference to the Wheeler-Lea Act. Has your budget been increased very considerably under the Wheeler-Lea Act for the purpose of carrying out its provisions?

Mr. KELLEY. No; it hasn't, Congressman. One of the biggest troubles, one of the biggest difficulties, that we have to overcome is that we have about twice as much work as we have men or money to do with. We have cases piled up in the public interest that we can't touch because we haven't any money or men to do with. It is a crying need. We mean business and we are going to carry out the purpose and the intent of the antitrust laws.

It is true that the Department of Justice has on a larger scale taken hold of this matter and taken on new employees, and they will help us out, but the Commission is overburdened with work. It is vital.

Mr. DAVIS. In that connection, Congressman Reece, it may be stated that the number of cases handled by the Commission, both the number investigated and the number actually tried and the number in which cease-and-desist orders were issued, the number in which stipulations were agreed upon, are three or four times as large as they were 5 or 6 years ago, and yet during that period we have had not over a 25-percent increase in appropriations.

Mr. FRANK. Mr. Kelley, I thoroughly agree with you in most of the instances to which you referred, where the Commission has taken action, has filed complaints, the persons complained of knew and their lawyers doubtless knew when they were consulted that if and when you were able to prove the facts there was a violation. I cannot, however, agree with you that over the entire range of the antitrust laws there are not numerous instances where people contemplating action are unable to know whether or not if they take that action it will constitute a violation of the antitrust laws. I have never had to do with the prosecution of the antitrust laws, but I have frequently been in the position, as a lawyer in private practice, of endeavoring to advise citizens as to whether if they acted they would fall afoul of those laws, and I can conscientiously say that I endeavored to answer to the best of my knowledge and not infrequently found it impossible to advise the client whether what he was contemplating doing would involve infraction of the law. I think you must differentiate between those citizens who are intent upon evading the law or violating it

without the possibility of detection, and those who conscientiously want to go about their business, are confronted with the provisions of the statute, find that it contains general terms, and go to their lawyer, who finds it impossible in advance of a court decision to say whether or not the proposed action will or will not be in violation of the antitrust law.

Mr. FERGUSON. Mr. Chairman, when the Federal Trade Commission was first organized in March 1915 and the members of the Commission at that time were presented with this very question as to making declaratory judgment where persons who wanted to engage in a line of conduct suggested by Commissioner Frank would present matters before the Commission and have the Commission decide whether or not that conduct would be in violation of the law, the Commission called into conference a number of the most distinguished lawyers in the United States, and among those was Louis Brandies, who was then practicing law in Boston before he became a member of the Supreme Court, and Justice Brandeis, as he afterward became, advised the Commission that it would be a very dangerous thing for the Commission to undertake, that no body of men were wise enough and capable enough to advise any person how closely to walk to the edge of a precipice without falling over, that it was very easy to advise people how far they could stay away from the edge of the precipice and be perfectly safe. That is a matter of record in the files of the Federal Trade Commission.

Mr. FRANK. Commissioner Ferguson, I don't want to be misunderstood. I have not suggested nor am I suggesting that it would be desirable or indeed lawful for the Commission under the existing statutes to give such opinions. I would quite agree with Mr. Kelley from such experience as I have had, which is very limited, that it would be undesirable on the basis of purely informal conferences to give opinions which would operate as estoppels. I am neither suggesting that the Commission can lawfully engage in such undertaking nor that if amendments to the statutes were enacted along the lines I have suggested, that those amendments should authorize action on the basis of informal conferences. That is not what I have in mind.

I have in mind that upon application formally made, setting forth facts, and after full and adequate investigation by the Commission, and after a public hearing at which all persons interested might appear, including the Commission's own staff representing the public interest, the Commission might well by statute be authorized to enter orders stating that such and such conduct would be lawful. Now such orders might be carefully conditioned; they might say that for the time being or for a given experimental period the Commission will allow such conduct to be undertaken; they might say that the order, which would be in the nature of an estoppel or exemption, should be operative only until such time, if no fixed time was inserted in the order, as the Commission on its own motion, after further investigation and determination of new facts, should cause the order to cease to be operative. That is not a novel suggestion. In the years that have intervened since the Commission first went into action numerous other administrative agencies have experimented with that device.

It seems to me that it would be worth while to collate all the experience of the various administrative agencies of the Government and determine whether the dire consequences that you picture have

in fact occurred in those instances where administrative agencies have been vested with those powers. In other words, we needn't discuss this thing today in vacuo, as you were obliged to discuss it at the time when your Commission was first created, nor is it necessary to consider what would happen if without authorization of Congress and purely upon the basis of informal conferences you were to engage in such a practice, but I do suggest that it would be well worth while for this committee to know what has happened in other administrative agencies empowered by statute to go through such a procedure.

I understand there is a subcommittee on which the Treasury is represented, your Commission is represented, and the Department of Justice is represented, to canvass that subject. Maybe this is not the time to discuss it, but I just didn't want to let your discussion go by without that much questioning; that is to say, I don't think you ought to rest your conclusions upon an opinion formed several decades ago with respect to what would happen if without authority of Congress your Commission were to give decisions based upon informal conferences.

Mr. KELLEY. I will just take half a minute, Mr. Frank. This is a big subject. First, I will say I don't think that Congress should give such power to any commission. Now the Federal Trade Commission is rather limited under the law. For instance, the Federal Trade Commission under the Federal Trade Commission Act has no authority to order a divestiture of property or transfer of property, even though it was used as an unfair method of competition. They held that in the *Eastman Kodak case* with certain justices dissenting.

As I pointed out yesterday, as far as the antitrust laws are concerned, the sky is just about the limit with respect to mergers. Where it is an agreement between the parties remaining in business, it is unlawful if they have ability to control the market.

I doubt that is true under the law as it is written just now with respect to mergers. Frequently there will be an agreement between competitors with respect to the suppression of competition between them that will be lawful. Because of various factors, they have no power to raise the price or hurt the public.

If such a group came in to the Commission, we would tell them so. But it is very rare, indeed. I have an open mind about it. I just have had the feeling that it wouldn't be protecting the public interest; it would be legislation directly and squarely in the teeth of the public.

We issued a complaint a couple of years ago against all of the cement companies in the United States. We had the greatest difficulty in getting facts in that case, and presenting our case. It will be closed in a couple of weeks. If the Commission in place of issuing that complaint and going at getting the truth and the facts with respect to those matters, had called a hearing and issued an order to the industry to come before the public and show cause to us why they shouldn't have an order, what would we do? We would have facts upon which there would be a finding that the Commission couldn't do anything except dismiss them and tell them to go home—"Your conduct is lawful." We wouldn't know the real truth about it, the honest truth. We have got to get that by going out in the byways, the paths.

The CHAIRMAN. This discussion has been extremely interesting, but, of course, it is obvious we can't determine it here. I rather judge, Dr. Walker, that the members of the committee don't desire to

ask you any further questions. So unless there is objection, you may be excused.

(The witness, Dr. Francis Walker, was excused.)

The CHAIRMAN. It was the understanding when we took the recess last night,¹ Congressman Reece, that Mr. Kelley was to make a response to your inquiry with respect to section 8 of the Clayton Act. Mr. Kelley, if you will be good enough to take that matter up, perhaps we can finish it before we recess this noon.

TESTIMONY OF WILLIAM T. KELLEY, CHIEF COUNSEL, FEDERAL TRADE COMMISSION, WASHINGTON, D. C.—Resumed

SECTION 8 OF THE CLAYTON ACT

Mr. KELLEY. I have only a word or two to say about this section. The Commission has instituted very few cases under section 8 of the Clayton Act, and the Department of Justice has instituted very few, if any, that I know of.

Mr. BERGE. I don't recall any.

Mr. KELLEY. No; I don't recall any, Mr. Berge.

Why hasn't the Government instituted any cases under that section? I will say first that I think the principal reason lies in the fact that the statute as to the competitive relationship between corporations and the effect of common directors on that relationship is the reason.

Let's read section 8:

That from and after two years from the date of the approval of this Act no person at the same time shall be a director in any two or more corporations, any one of which has capital, surplus, and undivided profits aggregating more than \$1,000,000, engaged in whole or in part in commerce, other than banks, banking associations, trust companies, and common carriers subject to the Act to regulate commerce * * * if such corporations are or shall have been theretofore, by virtue of their business and location of operation, competitors, so that the elimination of competition by agreement between them would constitute a violation of any of the provisions of any of the antitrust laws.

Under this section it will be noted that common directors between corporations engaged in interstate commerce are prohibited only if such corporations are or shall have been theretofore by virtue of their business and location of operation, competitors, so that the elimination of competition between them by agreement would constitute a violation of any of the provisions of the antitrust laws.

Now this is pure and simple, the test of legality laid down in the Sherman law, and the difficulty in applying such a test is that it is exceedingly difficult to determine under just what circumstances, without long trial and hearing, the elimination of competition by agreement would constitute a violation of the antitrust laws.

Under the rule of reason, the test of legality is the test of reasonableness at common law, and as we pointed out yesterday, in discussing section 7, an agreement between competitors limiting competition between them is illegal at common law if the parties by reason of their position in the field possess the power to control the market.

Now, this power to control the market perhaps needs further explanation.

In determining whether a control of the market would result from the elimination of competition, it would be necessary to consider the

¹ See p. 1793, *supra*.

extent of your market, depending upon the relative transportation costs, perishability of the commodity, and so forth; the size and output of the corporation. If the market is a national one, the output must be compared to the national output. Where the market is restricted, covering only a section of the country, the output must be compared with the supply available normally for that territory at normal prices.

Imports from abroad are affected by tariff duties, which is a factor that may be taken into account.

So all of these things determining this means in the case of common directors that you have to have an extended investigation to determine whether the corporations are in such a position that if they entered into agreement with respect to prices they would be illegal under the test of the Sherman law.

I think that is the principal reason why the Government hasn't done very much in enforcing that law. There is another reason, perhaps the other reason is more important than the reason I have spoken about, and that is, you all know what the so-called dummy director is. Well, this section is so written that it affects the individual but doesn't prohibit the dummy, and if you had an order requiring John Jones to get off one corporation, or two or three of them, he could just still say to his secretary, "You attend."

Now, whatever the reason is, or which of the two, I think that both have caused the Commission and the Department of Justice not to do much with that section. When this section was under debate, Senator Cummins offered an amendment as a substitute for the present section 8. His amendment read as follows:

It shall be unlawful for any person to be at the same time a member of the board of directors or other managing board or an officer of two or more corporations, either of which is engaged in commerce and which corporations are carrying on business of the same kind or competitive in character, provided that this paragraph shall not apply to banks, banking institutions, and common carriers.

That appears in Congressional Record, 14534. His amendment was rejected by a vote of 15 to 44. It will be noted that his amendment eliminated the Sherman law test and that it did not contain the \$1,000,000 limitation. The principal speech against Cummins' amendment was by Senator Chilton. He said that it was desirable to let a man expand his business by organizing new corporations, and that he believed in legislating against big business, not against little business, and that he thought that section 8 would legislate against little business.

It is not clear from the debates whether the Cummins amendment was defeated because of the elimination of the Sherman law test or because of the absence of the \$1,000,000 limitation. From the debates, I would say it was probably because of the elimination of the \$1,000,000 limitation.

The CHAIRMAN. Don't you have an idea, Mr. Kelley, when one considers all of the laws which have been passed during the past 50 years for the purpose of preventing conspiracies to restrain trade and to raise prices, and the difficulty which the courts and the commissions have experienced in attempting to enforce those laws, that the chief objective now should be to bring about a realization upon the part of that small proportion of business to which you and Judge Davis referred this morning, which wants to practice these restrictive devices,

that their only result is to prevent, in the last analysis, themselves and the whole public from attaining the prosperity that everybody needs. It has appeared to me to be getting more and more plain since we have tried dozens of ways to restore prosperity that the thing to be done now is to get a consensus of public opinion that instead of following restrictive practices any more we should come to a determination to follow practices which will expand business. Every businessman wants to grow, every businessman wants to increase his trade; but it is perfectly apparent from our 50 years of history that one definite result of restraint of trade has been to reduce the possible volume of business and to bring about such a tremendous and appalling degree of unemployment that the market which the businessman himself wants to reach is being restricted far below what it ought to be.

Mr. KELLEY. I agree with that statement, Senator.

The CHAIRMAN. Then it comes down to a conclusion that we don't need new laws so much as we need a new understanding of how to build up prosperity by recognizing one another's rights and by having all businessmen who want to be fair join hands with Government in suppressing the well-known practices and abuses which bring about restriction of trade.

Are there any questions to be addressed to Mr. Kelly?

The Commission is ready to proceed this afternoon? What will be the program this afternoon?

Mr. BALLINGER. We have to finish up two investigations authorized by Congress, the public utilities investigation and the agricultural income inquiry. Then we want to start in on the farm-machinery industry as one of our industry studies.

The CHAIRMAN. Can you complete that this afternoon?

Mr. BALLINGER. We hope to.

The CHAIRMAN. The members of the committee have impeded your program repeatedly this morning by precipitating that very interesting debate. Perhaps we can refrain from that this afternoon. Tomorrow of course, there is to be a special session of Congress to mark the one hundred and fiftieth anniversary, and it is probable that we won't want to have a session tomorrow. It is very desirable, therefore, that if possible we proceed this afternoon to a conclusion. The committee, then, will stand in recess until 2 o'clock this afternoon.

(Whereupon, at 12:10 p. m., a recess was taken until 2 p. m. of the same day.)

AFTERNOON SESSION

The hearing was resumed at 2:15 p. m., upon the expiration of the recess.

The CHAIRMAN. The committee will please come to order.

Judge Davis, are you ready to proceed?

Mr. DAVIS. Whom do you want to call?

Mr. BALLINGER. I want to call Colonel England, assistant chief economist of the Commission, to the stand, who will discuss the Commission's investigation of agricultural income, an investigation authorized by the Congress.

The CHAIRMAN. Do you solemnly swear the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Colonel ENGLAND. I do.

TESTIMONY OF COL. WILLIAM H. ENGLAND, ASSISTANT CHIEF ECONOMIST, FEDERAL TRADE COMMISSION, WASHINGTON, D. C.

Mr. BALLINGER. Will you state your name for the record?

Colonel ENGLAND. William H. England.

Mr. BALLINGER. What is your present position to the Federal Trade Commission?

Colonel ENGLAND. Assistant chief economist.

Mr. BALLINGER. How long have you been with the Federal Trade Commission?

Colonel ENGLAND. Continuously since May 1920.

Mr. BALLINGER. How long have you been assistant chief economist?

Colonel ENGLAND. Since about June 1920.

Mr. BALLINGER. Have you any further questions, Mr. Chairman?

The CHAIRMAN. No.

**RESULTS OF FEDERAL TRADE COMMISSION'S REPORT ON
AGRICULTURAL INCOME**

Colonel ENGLAND. Mr. Chairman and members of the committee, the agricultural inquiry was made by direction of Congress under Public Resolution No. 61, Seventy-fourth Congress, first session, approved August 27, 1935, and amended by Public Resolution No. 86, Seventy-fourth Congress, approved May 1, 1936. The resolution, as amended, authorized and directed the Federal Trade Commission to investigate and report the extent of decline in agricultural income in recent years; the increase or decrease for the same years of the income of the principal corporations or other principal sellers engaged in handling or processing certain essential farm commodities; the distribution of the consumer's dollar paid for those commodities, as between farmers, processors, and distributors; the growth of capitalization and assets of principal corporations and their costs, profits, investments, and rates of return; the avoidance of taxes by such corporations or their officers; the extent of control or monopoly in the handling or processing of those commodities and the methods and devices used for obtaining and maintaining such control or monopoly; the extent to which any fraudulent, dishonest, unfair, and indirect methods are employed in the grading, warehousing, and transportation of those commodities, and the prevalence of producer-cooperative organizations and their effects on producer and consumer. The Commission was also directed to report its conclusions and recommendations growing out of the inquiry.

An interim report was made on December 26, 1935, and printed as House Document No. 380, Seventy-fourth Congress, second session, and the final report, Principal Farm Products—Agricultural Income Inquiry, was submitted to the Congress March 2, 1937. The summary and conclusions and recommendations of the final report were printed as Senate Document No. 54, Seventy-fifth Congress, first session.

PRINCIPAL FARM PRODUCTS COVERED

Colonel ENGLAND. Principal farm products covered in the investigation were wheat, cotton, tobacco, potatoes, livestock, and milk. Wheat reflected the greatest decline in gross income to farmers from

1929 to 1932. In 1932 gross income from wheat amounted to only about 29 percent of the gross income of 1929. Milk showed the smallest decline, but the gross income of farmers from that commodity in 1932 was only 54.3 percent of that in 1929. The sharpest recovery in the gross income of farmers from the low year of 1932 was in tobacco. By 1934 the income from tobacco production aggregated 78.5 percent of that in 1929.

Generally speaking, the gross income represented by sales by the principal manufacturers, processors, and distributors of these products fell off less than the gross income of farmers from their production, and the recovery from the low point of the period by the manufacturers, processors, and distributors reached a higher percentage of the 1929 figure than was true of the gross income of the farmer-producers of these products.

The report shows how the consumer's dollar was divided between distributor, processor, and farmer in the prices paid for butter, fluid milk, wheat flour, wheat bread, cigarettes, beef, veal, and pork during the period covered by the inquiry. Butter, as contrasted with bread, a product involving a relatively large processing cost, showed a high percentage of the consumer's dollar going to the farmer. In 1934 in 51 cities the weighted average retail price of butter, graded 92 score or better, was 31.5 cents per pound. Of this retail price, wholesale and retail distributors received a combined average gross margin of about 25 percent, manufacturers about 16 percent, and producers about 59 percent. In 1935 in 51 cities the weighted average retail price of white wheat flour bread was 8.3 cents per pound. Retail distributors received about 19 percent of this price as their average gross margin, bakeries 56 percent, flour millers 7 percent, wheat middlemen and transportation agencies 5 percent, and the gross proceeds of wheat farmers were about 13 percent.

TOBACCO GROUP'S CONCENTRATION OF CONTROL

Colonel ENGLAND. The inquiry disclosed that 13 tobacco manufacturers sold in 1934 more than 97 percent of the cigarettes, more than 90 percent of the smoking tobacco, upward of 75 percent of the chewing tobacco, and in excess of 98 percent of the snuff produced in the United States. The report discusses methods by which the larger companies obtained commanding positions in their respective industries, which are shown to have been by acquisition of competing firms, or by expansion, or by both.

The CHAIRMAN. Was it suggested that the acquisition of the competing firms was in any degree in violation of section 7 of the Clayton Act?

Colonel ENGLAND. No, sir; it was through the acquisition of assets.

The CHAIRMAN. After that device of acquiring assets instead of stock had been adopted?

Colonel ENGLAND. That is right.

Mr. HINRICHS. May I ask a question, Mr. Chairman? In the third line on that page you referred to producers. I assume you are using producers and farmers as synonymous terms in more or less a physiocratic sense. You are not implying the other groups are not also producers, are you?

Colonel ENGLAND. That is correct.

Rates of return on the investment for the period covered, 1929 to 1935, inclusive, earned by the reporting tobacco manufacturers, the biscuit and cracker companies, and the chain grocery companies are shown in the report. The annual averages were 15.8 percent for the tobacco manufacturers, 14.6 percent for the biscuit and cracker companies, and 16.4 percent for the chain groceries. Milk processors and distributors, wholesale baking companies, and wheat middlemen showed higher rates of return during the first 3 years of the period than for the last 3 years. Average annual returns for the entire period were 9.57 percent for the milk companies, 8.76 percent for the bakers, and 10.59 percent for the wheat middlemen. Returns to wheat processors, wholesale flour distributors, and chain drug store companies (large distributors of tobacco products) were substantial for all years except 1932 and averaged 7.76 percent, 9.61 percent, and 8.29 percent for these respective groups. Reporting meat packers had an average rate of return of 4.28 percent; shoe manufacturers, 4.77 percent; leaf-tobacco middlemen, 7.44 percent; tobacco wholesalers and jobbers, 4.43 percent; cotton processors, 1.52 percent, with losses in some individual years. Tanning and leather companies sustained a loss, averaging for the period 1.89 annually; and chain tobacco stores, a loss averaging 1.37 percent annually.

The CHAIRMAN. In other words, the conclusion that you want us to gather from these figures is that in these particular industries in which the processors have been able to effect a high degree of concentration they have also been able to maintain their prices and to maintain their profits during this general period of depression, while the farmer and the rancher who produce the raw material which the processor makes available to the consumer have not been able to get the cost of production out of their goods.

Colonel ENGLAND. Senator, that states it very nicely. That is correct.

CONDITIONS IN TERMINAL GRAIN MARKETS AND RECOMMENDATIONS OF THE COMMISSION

Colonel ENGLAND. Inquiry made into conditions of merchandising grain in the terminal markets showed that many of the practices which were the subject of criticism by the Commission in earlier investigations of terminal grain markets still existed. One of these is the control of railroad-owned terminal elevators, leased by large merchandisers of grain at low rentals, giving the lessees an undue competitive advantage over other grain merchandisers in the purchase and handling of grain, with the result that such large merchandisers practically dominate both the cash and futures markets.

In its conclusions and recommendations with respect to the grain trade, the report said that correction of conditions described therein could not be left to the trade itself, and that Federal legislation should be enacted providing, among other things:

1. That all deliveries of grain on futures contracts shall be made from public warehouses:

- a. Licensed by Federal authority;
- b. Subject to Federal regulation;

- c. Not owned, operated, or controlled, directly or indirectly by any person, firm, or any other organization directly or indirectly dealing in grain.

2. That all deliveries of grain on any future contracts shall be subject to:

a. Federal grading and inspection;

b. Federal regulation of the delivery of grain on such contracts.

In respect to cotton merchandising, the report, after showing that cotton merchants and spinners generally regard the operations of the futures market under southern deliveries with satisfaction, recommended further study of the system of southern deliveries to ascertain whether legislation should be enacted providing for making the contract more merchantable.

The report cited the unbalanced relations between industry and agriculture and suggested that making available to the public of reliable and adequate information concerning the large industrial corporations would constitute an important step toward correcting this condition.

Concerning the value of cooperative associations, the report explained that although an exact measure of their value in dollars and cents would be difficult to obtain, the Commission desired to add to the vast body of opinion its own conclusion that true cooperative associations have been of great value to the producers of farm products, and that such cooperatives have significantly increased the bargaining strength of producers and reduced the spread between producers' and consumers' prices.

The inquiry disclosed, in several of the industries, a high degree of monopolistic control, frequently due to methods contrary to the letter or spirit of the law. In this connection, the Commission, in its report, renewed its recommendation for amendment of section 7 of the Clayton Act, which now prohibits the acquisition by one corporation engaged in commerce of stock in a competing corporation so engaged where the effect may be to substantially lessen competition between such corporations. The Commission recommended an amendment to prohibit acquisition of assets, not only indirectly through use of stock unlawfully acquired, but also direct acquisition of assets independently of stock acquisition. Under a decision of the Supreme Court, the Commission cannot effect the separation of units acquired through purchase of capital stock if, following the stock acquisition, but prior to service of the Commission's formal complaint, assets of the companies whose stock has been acquired are merged.

Additional recommendations were made by the Commission as a further check to monopolistic tendencies.

TOBACCO MARKETING

Colonel ENGLAND. Legal studies of the extent of possible concentration of control and of monopoly, and of any methods and devices used to gain such control, were made with regard to tobacco and potatoes.

The investigation failed to disclose that any one company had a monopoly in the manufacturing, processing, warehousing, distribution, or marketing of leaf tobacco or tobacco products. Considerable concentration of control was found, however. Five buyers of leaf tobacco, two of whom primarily represent English companies, generally purchased about 75 percent of the total domestic production and their purchases are largely concentrated in the auction belts. Three com-

panies and, to a less extent, a fourth, substantially control the manufacture of cigarettes of the most popular price class, and are also important factors in the manufacture of smoking and chewing tobacco. Three other companies control about 97 percent of the total snuff business.

No substantial price fixing or price agreements in the marketing of leaf tobacco were found except in the minimum sale prices established for dealers in Connecticut shade-grown tobacco pursuant to an Agricultural Adjustment Administration marketing agreement.

The CHAIRMAN. In other words, that particular agreement, then, was made after conference with the A. A. A.?

Colonel ENGLAND. That is correct.

The CHAIRMAN. And to what extent were the minimum prices fixed by that agreement? Do you know?

Colonel ENGLAND. I cannot answer that, Senator. I didn't have direct charge of this. Dr. Dawkins may answer it.

Dr. DAWKINS.¹ The minimum prices were established in the marketing agreement itself.

The CHAIRMAN. To what extent were they established? Covering different grades? How many different prices were there that were fixed?

Dr. DAWKINS. There was provision for each grade recognized under the grading system of the Department of Agriculture. The minimum price was fixed for each such grade.

The CHAIRMAN. That was minimum price to the tobacco farmer?

Dr. DAWKINS. No, sir; a minimum price for the marketing company or individual. There were no prices fixed covering the purchase from the actual producer.

The CHAIRMAN. Who got the benefit of this minimum price?

Dr. DAWKINS. I should say the marketing agencies.

The CHAIRMAN. Who paid the price?

Dr. DAWKINS. The tobacco, the cigar manufacturers.

The CHAIRMAN. It was, then, a minimum price to be paid by the processor to the middleman?

Dr. DAWKINS. That is correct.

The CHAIRMAN. And there was no protection granted to the tobacco farmer?

Dr. DAWKINS. Except such as may have indirectly been reflected to him as a result of the stabilization of price which the middleman received.

Mr. FRANK. May I suggest that I am not sure that the Department of Agriculture would agree with him on that. It was felt there was control of supply coupled with that and agreement and that the two together had that consequence. I am not speaking for the Department.

The CHAIRMAN. Had which consequence?

Mr. FRANK. Had the consequence of reflecting an increase in price to the farmer. I think in fairness to the Department of Agriculture that statement ought not to stay unchallenged.

The CHAIRMAN. But it would appear from the statement that the only price which was actually fixed was the price which the middleman received. The price was not fixed for the tobacco farmer.

¹ Dr. Robert B. Dawkins, member of Chief Examiner's Staff, Federal Trade Commission.

He was left for his benefit to the incidental result which might flow from whatever control was exercised over the amount to be produced.

Mr. FRANK. Yes. I wouldn't want to make an exact statement, because I wouldn't be qualified to, but I think before such inference as might be drawn from the statement is allowed to stand in the record the Department of Agriculture ought to be given an opportunity to supplement it.

Mr. BALLINGER. Mr. Dawkins is a lawyer in the chief examiner's office and has worked actively on this study.

Colonel ENGLAND. This is a part of the legal study.

The CHAIRMAN. I wondered if the reference which you have here to exhibit 266 of the Federal Trade Commission has any bearing on this particular item.

Colonel ENGLAND. Senator, that does not.

Mr. MOREHOUSE. That refers to the page of the compilation which was previously entered in the record.

The CHAIRMAN. Very well, you may proceed.

Colonel ENGLAND. Information obtained during the inquiry indicated that competition in the cigarette industry might be increased by popular cigarettes selling in various price ranges and that new or more important competition in manufacturing would result in increased competition in the purchase of leaf tobacco. The opinion was expressed that the uniform internal revenue tax of \$3 per thousand on small cigarettes has tended to restrict the manufacture and sale of 10-cent cigarettes, the most active and substantial new competition that has manifested itself in the industry in many years. The Commission therefore recommended that Congress consider the advisability of levying a graduated tax on cigarettes in lieu of the present uniform tax.

The CHAIRMAN. In preparation of this report, did the Commission consult the Treasury Department?

Colonel ENGLAND. I understand so.

Dr. DAWKINS. Yes, sir.

The CHAIRMAN. Did the Treasury have any opinion with respect to the statement the witness has just made?

Dr. DAWKINS. The Secretary of the Treasury at a previous time had furnished to the Ways and Means Committee of the House an estimate of the effect upon the revenue of certain graduations in the cigarette tax. When this investigation was in progress we consulted the general counsel of the Treasury Department with regard to this recommendation, and he had no opinion to express for the Treasury at that time and had no objection that he cared to express with respect to it.

The CHAIRMAN. Mr. O'Connell makes no comment.

Colonel ENGLAND. I might say, Senator, that that is our general practice. When our studies overlap those of some other organization, we find out pretty definitely that we are on safe ground.

The CHAIRMAN. I am sure that is the case.

POTATO MARKETING

Colonel ENGLAND. Processing of potatoes is so limited in volume as to be of little consequence. No close approach to monopoly was found

in their warehousing, distribution, or marketing. Excessive production financing charges and local marketing fees are exacted in certain instances, but remedies are available to the majority of growers affected through production credit associations organized pursuant to the Farm Credit Act of 1933, and by collective action among producers.

FRESH FRUITS AND VEGETABLES AND THE COMMISSION'S CONCLUSIONS AND RECOMMENDATIONS

Colonel ENGLAND. Public Resolution No. 61, amended by Public Resolution No. 112, Seventy-fourth Congress, second session, approved June 20, 1936, authorized and directed the Commission to make further investigation with respect to agricultural income from table and juice grapes, fresh fruits and vegetables, and to make both interim and final reports. The interim report was submitted February 1, 1937, and printed as Senate Document No. 17, Seventy-fifth Congress, first session, and the final report was submitted June 10, 1937.

Under the resolution, the scope of this investigation was generally the same as that of agricultural income.

The Commission's final report shows that the farmers' gross income from the production of fruits and vegetables declined in 1932 to 51.84 percent of the 1929 gross income. This was the lowest point reached during the 7-year period, 1929 to 1935, inclusive. By 1935 it had recovered to 70.02 percent of the 1929 level. The sales of no group of the reporting processors and distributors of fruits and vegetables, either fresh or processed, fell during the 7-year period to as low a percentage of its 1929 sales as did the farmers' gross income in relation to its 1929 level, nor failed to exceed the percentage of recovery reached by the gross income of the farmer.

In other words, it is generally the same situation as for the principal products.

In the matter of monopoly and control, the inquiry on fruits and vegetables disclosed significant proportions of the national production of certain kinds of fruits and vegetables handled by only a few of the large corporations and cooperative associations, such as the California Fruit Growers' Exchange, Florida Citrus Exchange, Mutual Orange Distributors, and Lake Wales Citrus Growers' Association. The most important chain-store system in the distribution of fresh fruits and vegetables is the Great Atlantic & Pacific Tea Co.

The distribution of the consumer's dollar paid for five fresh fruits and five fresh vegetables handled by chain grocery stores is shown in the report. The fruits are (1) table grapes, (2) Florida and California oranges, (3) Florida grapefruit, (4) Pacific Northwest apples, and (5) Georgia and Carolina peaches. The vegetables are (1) Maine, Virginia, Maryland, and Idaho potatoes, (2) Texas onions, (3) Texas and Florida cabbage, (4) Florida and California tomatoes, and (5) iceberg lettuce from the Pacific coast. Of the consumer's dollar paid for the five fresh fruits combined, for those markets and producing areas for which the information was obtained, the growers' proceeds were 29.4 cents, distributors' gross margins were 35.33 cents, and transportation and all other costs, including packing and loading, absorbed the remainder of the dollar. The retail margin alone amounted to 31.14 cents and transportation costs, including icing

and heating, to 20.21 cents. For the five fresh vegetables, growers' proceeds were 34.78 cents; distributors' margins, 32.10 cents; and transportation and all other costs, 33.12 cents. The retail margin alone was 27.26 cents and transportation was 22.82 cents.

For all groups of companies comprising the processors and wholesale distributors, the rates of return on investment were lowest in 1932, and for the groups comprising the chain-store distributors they were lowest in 1935. Relatively high rates of return, however, were earned by chain-store distributors.

Producers' marketing cooperative associations are important in the distribution of some fresh fruits. In 1934, they marketed almost 62 percent of the total cranberry production of the United States, 57 percent of all citrus fruits, 28 percent of the dried prunes, 16 percent of the grapes, and 7.5 percent of the apples. For some vegetables the percentages are substantial, and for particular commercial producing areas for both fruits and vegetables the proportions are large. Processing and bargaining cooperatives are of less importance in the fruit and vegetable industry. Marketing cooperatives were found to be most successful for products having relatively long marketing seasons, making possible the permanent employment of skilled marketing personnel, and for products, the commercial production of which is largely concentrated in, at most, a few highly specialized producing areas, such as oranges in California and Florida.

Many aspects of the marketing of fresh fruits and vegetables are discussed in the report, including marketing by large organizations, production financing, shipping by truck, character and adequacy of terminal market facilities, terminal market inspection, terminal market cartage, loss and damage claims, and sale of fruits at auction.

The report shows that monopolistic and racketeering practices in the carting of fruits and vegetables exist in several of the larger terminal markets, particularly in New York, Philadelphia, and Chicago. An analysis of the facilities and conditions existing in a limited number of the larger terminal markets shows that although many of the facilities have been modernized, there has been a marked lack of scientific planning. Many unfair practices have developed in the terminal inspection service in recent years, particularly as it affects loss and damage claims.

Five concerns, other than cooperative associations, distribute fresh fruits and vegetables on a national or very wide scale. Three of these, the Atlantic Commission Co., Wesco Foods Co., and Tri-Way Produce Co., are subsidiaries of chain grocery stores while the other two, American Fruit Growers, Inc., and Nash-Finch Co., are independently owned. The subsidiaries of the chain-store companies follow substantially identical methods in the purchase of fruits and vegetables. They buy from growers and shippers as well as from terminal market receivers and distribute some tonnage to the independent trade in addition to that sold to their parent companies. Prior to the passage of the Robinson-Patman Act in 1936, chain buying subsidiaries customarily obtained a brokerage, or its equivalent, in the form of a price reduction, from their principal shippers. This practice has been discontinued, but each of these companies, to a greater or lesser extent, receives discounts or price reductions in lieu of brokerage in purchases from principal shipping connections.

In the Commission's conclusions, it was set forth that certain practices in the carting of agricultural products in New York, Chicago, and Philadelphia amounted to illegal agreements in restraint of trade and in violation of the antitrust acts; and that the activities of the agents of the teamsters' union in Chicago, Cleveland, and Philadelphia in interfering with outside trucks were in violation of the Federal Antiracketeering Act. As to these practices, the Commission has made its evidence available to the Department of Justice.

The report recommended that the Perishable Agricultural Commodities Act be amended to authorize and direct the Secretary of Agriculture to make complete condition inspections for the purposes of determining the extent of damage and insofar as practicable the cause of such damage on all cars of the more perishable commodities arriving in the principal terminal markets.

It also recommended that the Interstate Commerce Commission be authorized and directed to require the claim division of the Association of American Railroads to furnish periodically, for the information of all interested persons, certain data concerning tonnage or number of carloads of each kind of fresh fruits and vegetables and of melons delivered by each railroad to each of the principal terminal markets, and the average amount of claims paid by each of these railroads per carload of each of these perishable commodities delivered in the various terminal markets.

Amendment of the Interstate Commerce Commission Act was also recommended to empower the Interstate Commerce Commission to prescribe certain rules and regulations governing the filing, investigation, and payment of all loss and damage claims in the shipment of perishable commodities.

The CHAIRMAN. Did you participate in this study?

Colonel ENGLAND. I did not; I was working on the utilities investigation at that time.

The CHAIRMAN. The results of it, however, would indicate that the returns of the farmer have fallen further and recovered less than the returns obtained by the middlemen and the processors combined.

Colonel ENGLAND. That is absolutely correct and as you stated a while ago that profits were larger where there was a high degree of concentration—profits for the manufacturers were larger where there was a high degree of concentration.

The CHAIRMAN. But the recommendations for legislation which are contained here all seem to tend toward a higher degree of policing of the industry.

Colonel ENGLAND. That is correct.

The CHAIRMAN. Do you think it is possible effectively to police an industry of this kind?

Colonel ENGLAND. That is a tremendous task, Mr. Senator.

The CHAIRMAN. We'd have to employ half of the people of the country to watch the other half, wouldn't we?

Colonel ENGLAND. Something like that.

The CHAIRMAN. Doesn't that in your opinion indicate that perhaps reform is to be obtained in some other way than merely by legislation and by punitive action?

Colonel ENGLAND. Possibly, but just the fact that there is inspection, even period inspection, would have quite a good effect. It is

like the policemen. We don't have as many policemen as we have citizens but most of our citizens——

The CHAIRMAN (interposing). Here are two outstanding facts which are constantly recurring to everybody who studies this problem: First, the return of the farmer is decreasing; his proportion of the national income is constantly decreasing. Naturally as his return decreases, as his proportion of the national income falls away, he becomes a poorer market for the products of industries. The second fact is that while this concentration is proceeding, this concentration of middlemen and processors, unemployment is increasing. The larger the number of persons unemployed, necessarily the smaller is the market to which the processor and the middlemen must appeal if they are to maintain profits over a long period, so that it would appear that those who participate in restrictive programs, those who build up concentration at the expense of free enterprise, are in the last analysis eventually killing off their own markets.

Colonel ENGLAND. I think that is undoubtedly true.

The CHAIRMAN. Are there any questions to be asked of this witness?

Mr. DAVIS. Mr. Chairman, with regard to your suggestion about policing, as I understand it, it is the conception of the Commission that what is contemplated by the suggested policing, if we term it that, is primarily to ascertain the actual facts upon which corrective action may be taken and, secondly, to undertake to see that the different members of industry play the game fairly and that they do not engage in these unfair practices which are injurious to their competitors and injurious to the consuming public. It isn't contemplated that any government tribune should undertake to run their businesses for them, or doing anything approaching that, but simply to umpire the proceedings to the end that they may be prevented insofar as possible from indulging in practices which different laws denounce or which the committee might see proper to recommend that might be further conceived in an effort to maintain fair competition and to prevent these predatory practices which make for restraint of trade and the evils which some of us think flow from that.

The CHAIRMAN. I think I understand your point of view, Judge.

Mr. Hinrichs, you were about to ask a question.

Mr. HINRICHs. Yes, Mr. England, on page 5¹ you were referring to the relatively high rates of recurring returns earned by chain-store distributors, at the bottom of the page. At the end of the preceding paragraph you referred to an average retail price margin. Was the retail price margin larger in the case of Atlantic & Pacific than it was in general? Is that a proper question or are your returns of such a confidential character that it can't be answered?

Colonel ENGLAND. I am going to ask my colleague, Dr. Stephens. Can you answer that question? I cannot answer it.

Dr. STEPHENS.² I don't think I quite get that question.

Mr. DAVIS. Dr. Stephens is one of our economists.

Mr. HINRICHs. The reference is made here to high rates of return in a discussion of concentration and monopoly. Earlier you had referred to the costs of distribution. I take it that a high rate of return can be earned either under conditions of low-cost operation or under

¹ Page reference is to copy from which Colonel England was reading. See p. 1823, supra.
Dr. George A. Stephens, Chief Statistician, Federal Trade Commission.

conditions where either high prices prevail or low prices are paid, and I was wondering if you had any evidence in this study of excessive costs of distribution through the chain stores, or if it was simply incidental, that you were referring to a high rate of earnings.

Dr. STEPHENS. I think we do not have these costs that you speak of, of distribution by the stores. We do have the margin, the gross margin; we have the part that the distributors, the retail distributors, their proportion of the consumers' dollar. We have that.

Mr. HINRICHS. Is that proportion of the consumers' dollar higher in the case of the Atlantic & Pacific than in the case of the distributive trades generally?

Dr. STEPHENS. Well, I don't think we have anything on that here, but I think that probably that would be generally true.

Mr. HINRICHS. That their distributive costs—

Dr. STEPHENS (interposing). No; that the margin, but understand, that is a gross margin we are speaking of here.

Mr. HINRICHS. But it would indicate the combination of its higher costs or higher profits but not a condition of lower cost to the consumer?

Dr. STEPHENS. It would indicate a gross, a higher gross there. It wouldn't indicate which was greater, whether it was the profit or the costs.

Mr. HINRICHS. Would it be proper to ask to have information on that point introduced into the record in connection with this presentation?

Dr. STEPHENS. I think it would.¹

Mr. HINRICHS. The figures on profits alone are inconclusive, am I correct in that?

Dr. STEPHENS. Yes; I should say so, as to profits.

Mr. HINRICHS. One further question in connection with rates of returns. On page 2, am I to understand from those rates of returns that were shown on page 2 that you found a direct correlation between the degree of monopoly or concentration and the rate of profit which was being earned?

Dr. STEPHENS. The rate of profit on the investment. There are cases as it is shown here by the packers, the meat packers, where the rate of profit is comparatively low; concentration there is high so it isn't universally true. You will note that fact that I think it is between 4 and 5 percent for these large packers.

The CHAIRMAN. In other words, the profits do not increase in the same degree that the concentration increases.

Dr. STEPHENS. The net profits on the investment, you do not find that always true, no increasing in that rate. I don't think you can make a generalization of that sort.

Mr. HINRICHS. It is also true, is it not, that in some of these industries with a very low degree of concentration, possibly with a low rate of return, that very high rates of returns are earned by individual efficient producers?

Dr. STEPHENS. Yes, indeed.

Mr. HINRICHS. That would be true, for example, in connection with that 1.52 percent return for cotton processors.

¹ Dr. Stephens submitted a memorandum which was introduced at hearings held May 22, 1939, and marked "Exhibit No. 598"; it is included in the appendix on p. 2299.

Some of those in 1936 would show 25 percent returns or more on investment. Is that correct?

Dr. STEPHENS. I think that might be true.

Colonel ENGLAND. I might say that we always find a very wide variation in the rates of return, and you find that the companies may have a high rate of return one year and may have a low rate the next year. There are so many conditions. If a local company of a certain community is prosperous you have higher rates of return than if it is relatively depressed with relation to the rest of the country.

Mr. HINRICHS. A low rate of return may indicate nothing more than a very inefficient utilization of capital while a high rate of return indicates either an unusual degree of efficiency or an efficient utilization of capital in an expanding market that may in itself be highly competitive. Is that not true?

Colonel ENGLAND. That is correct; yes, sir.

The CHAIRMAN. Are there any other questions?

Mr. O'CONNELL. I have a question in arithmetic on page 5,¹ paragraph entitled "Distribution of the consumer's dollar," middle of the paragraph. "Of the consumer's dollar paid for the five fresh fruits combined, for those markets and producing areas for which the information was obtained, the growers' proceeds were 29.4 cents, distributors' gross margins were 35.33," and the rest of the cost you have taken up. "The retail margin alone amounted to 31.14 cents and transportation costs 20.21." Adding those four figures together I get about 116 cents. It must be that there is an overlapping between some of those figures. Is that right?

Colonel ENGLAND. You see, the remainder between 29 plus 35.33 and \$1 includes the packing, loading, and so forth. The retail margin was 31.14 and that is 31.14 out of the 35.33.

Mr. O'CONNELL. I see.

Colonel ENGLAND. Do I make myself plain?

Mr. O'CONNELL. Yes.

Colonel ENGLAND. It would have been much better if there had been one other figure put in there; it would have made it clear.

Mr. O'CONNELL. I have another question I should like to ask. Going back again to page 2, paragraph entitled "Conditions in terminal grain markets," the statement is made that inquiry indicated "that many of the practices which have been the subject of criticism by the Commission in earlier investigations." Do you happen to have any first-hand information about what in particular that refers to, as to whether the Commission had taken any action or had merely criticized practices of this type before?

Colonel ENGLAND. That goes back to a series of inquiries that were made at the beginning of the war and continued over a long period of time in the grain market. I would have to refer to the record to refresh my mind on that. If it is desired we can furnish the information.

Mr. O'CONNELL. No; never mind.

The CHAIRMAN. Are there any other questions?

Dr. THORP. I have one, Senator, as to whether the investigation carried over a long enough period of time to give light on the generally held belief that more and more of the consumer's dollar is going into

¹ Refers to copy from which Colonel England was reading. See p. 822. *supra*.

distribution costs and less and less is going to the original producer, not only in agriculture but in the general economic system.

Colonel ENGLAND. It did not cover a sufficient period to establish that fact. That would be, as you know, quite an expensive inquiry.

The CHAIRMAN. Thank you very much, Colonel England.

Mr. MOREHOUSE. In connection with Colonel England's testimony we would like the record to show that the reports of which I spoke, containing the full details and the reports to Congress, are left here as a part of the permanent records of this committee, marked "Federal Trade Commission Exhibit 194, a, b, and c." (a) Covers the principal farm products, (b), fruits, vegetables, and grapes, and (c) the summary report.

The CHAIRMAN. These reports may be filed with the committee.

(The reports referred to were marked "Exhibits Nos. 316, 317, and 318," respectively, and are on file with the Committee.)

Mr. BALLINGER. I wish to call Colonel Chantland to the stand. I will qualify the witness and then Judge Davis, I think, would like to make a preliminary statement before Colonel Chantland proceeds.

The CHAIRMAN. Do you solemnly swear that the testimony you are about to give in this proceeding shall be the truth, the whole truth and nothing but the truth, so help you God?

Colonel CHANTLAND. I do.

TESTIMONY OF COL. WILLIAM T. CHANTLAND, ATTORNEY FEDERAL TRADE COMMISSION, WASHINGTON, D. C.

Mr. BALLINGER. State your name for the record.

Colonel CHANTLAND. William T. Chantland.

Mr. BALLINGER. What is your present position in the Federal Trade Commission.

Colonel CHANTLAND. I am an attorney, helping out on this work.

Mr. BALLINGER. How long have you been with the Federal Trade Commission?

Colonel CHANTLAND. I came over here, in March 1915, shortly after it was organized and helped set up the Chief Examiner's Division at that time.

The CHAIRMAN. You say you came over there. From where?

Colonel CHANTLAND. From the Department of Justice.

Mr. BALLINGER. What particular position or what particular role did you play in the public utilities investigation? What was the particular nature of your work?

Colonel CHANTLAND. That, as I think most of you know, occupied us 8 full years, or a little more, and during the first 6½ years of that period I was in direct charge of the legal staff under Judge Healy, as chief counsel. After he went to the Securities and Exchange Commission I was in full charge. The latter portion of the period included the time in which our reports were prepared.

Mr. BALLINGER. Would you state briefly what experience you have had with the Government?

Colonel CHANTLAND. As I said, I came to Washington, to the Department of Justice in 1911, when Senator Kenyon was trust buster, intending to stay 2 months, and I am still here. After the war was over I was in private practice for a little while, during which I was counsel for two Senate committees and one House committee, the

Senate committee on post-war activities and the House committee on war activities. In 1922 I was sent back from the Federal Trade Commission to the Department of Justice on Presidential order to become a part of the War Frauds Section there, and came back to the Commission in 1927, and this utility inquiry opened, as you know, by the resolution of the Senate of February 15, 1928, and from that time until it closed in 1936, I gave my entire attention to that.

Mr. DAVIS. Mr. Chairman: Before Colonel Chantland enters upon his statement in regard to the utility investigation I wish to make a general explanatory statement. As has already been indicated, this committee delegated to the Federal Trade Commission the duty of assembling and presenting for the consideration of the committee such material as it had in its files in the light of its past experience which related to the subject under inquiry. There was so much in the files of the Commission that it was impossible to present everything that related to the subject, and in the interest of brevity and having due consideration for the valuable time of the members of the committee, the Commission in effect has gone back only 7 or 8 years, and in presenting much of the material which has already been presented orally or filed with the committee, and other material which will follow, there is no indication that all of that embraces any present live issue so far as requiring action by the committee, but it is presented in order to give what might be termed a historical picture of what has happened in various cases and what has been developed by investigations in various industries. For instance, the Commission has presented summaries, together with, as exhibits, the pertinent documents of various cases which were formerly tried by the Commission and in which cease-and-desist orders were entered and in which decisions of the Commission became final either by failure of appeal or upon affirmation upon appeal.

So far as we know, the persons and concerns involved in those particular cases have complied with the cease-and-desist orders of the Commission and have ceased the practices condemned in those orders. However, that is presented to the committee in order that you may have a picture of the methods employed in these various cases, and by these various industries or members of industry, to effectuate restraint of trade, or to indulge in monopolistic practices and the effects thereof.

The CHAIRMAN. In other words, while individual corporations may have reformed, you cite history in order to show what the practices have been or are.

Mr. DAVIS. Yes, and well-known practices which we learn from time to time are being engaged in by other members of those or other industries.

The CHAIRMAN. So that the issues are live enough for the consideration of the committee so far as practices are concerned, but they are merely historical data so far as individuals are concerned.

Mr. DAVIS. That is the point exactly which I want to make. It wasn't presented with any idea that we want the help of the committee or of the Congress to deal with those particular instances, but we do think that every case that we have presented, and particularly the certain number which were picked out as representing various different types of practices which were indulged in, are very live matters and we feel will have to be considered by the committee in reaching a solution of some of the questions involved.

The CHAIRMAN. I take it, therefore, that you haven't reached such a degree of optimism as to justify the hope or the belief that a cease-and-desist order by the Federal Trade Commission in a particular case means the abandonment of that particular monopolistic practice for all time in the future by all other industries.

Mr. DAVIS. That is true. While most salutary effects outside the particular ones involved have very frequently occurred, yet unquestionably they do not occur in all cases, and others who are not involved persist in taking up some of the same practices involved. So what I say with regard to that is likewise true of some of the general investigations which have been conducted by the Commission and which are being presented and will be further presented.

For instance, with respect to the matter which Colonel Chantland is going to discuss, the electric and gas utility investigation which was conducted by the Commission pursuant to a Senate resolution, in which Congress was sufficiently interested that it provided from year to year additional funds to carry on that investigation for a period of eight years, under the terms of the resolution, except during the time when Congress was not in session, the Commission filed monthly reports of its progress with the Senate, and then those and subsequent reports, including the summaries and conclusions and recommendations, were all filed with Congress, aggregating all told nearly 100 volumes, which are Senate documents and which are of such interest that the Commission still receives frequent requests for various volumes, both from members of the industry, from banking houses, and from economists and students of the problem, from various Government departments and from State commissions; in fact, so much so that Congress has had to provide additional funds for printing new volumes of a good many of those reports, so that they are still in general use and frequently are quoted from by various students and writers on the subject.

There were two or three phases of that investigation as directed by the Senate resolution. One was the propaganda methods employed by the industry, and we have two filed volumes on that which give a very illuminative picture of the various methods that were employed to lull the public into a sense of security with respect to their corporate issues and also that everything that they were doing was perfectly all right, and so forth. That was one phase of it, of which Colonel Chantland had direct charge.

Another phase of it was the holding-company system. It particularly directed a study and report upon holding companies, their conduct and methods in those industries, and a good deal of our various factual reports and other reports relate to that subject because, as was developed in the inquiry, nearly all of the electric and gas utility systems are under the control of holding companies.

Largely as a result of those disclosures and reports, Congress enacted certain legislation. I think it generally is conceded that these developments, these reports, contributed most materially to the enactment of the Securities Act in 1933 and to the Securities and Exchange Commission Act and the Holding-Company law, and the 1938 Gas Act.

Many of the evils which were pointed out as existing in the industry, and with particular reference to the holding-company system, are condemned in these acts. Take for instance the Holding Company Act, which was passed by Congress and the administration of which

was vested in the Securities and Exchange Commission. It, generally speaking, condemns and prohibits at least the major part of those practices which Congress considered to be evil and also, as you know, provides for dealing with the holding-company situation with respect to certain industries, particularly the electric utility industry and, I think, to some extent the gas, and so far as we are advised and as we believe, the Securities and Exchange Commission is faithfully and efficiently administering that law according to the intent of Congress.

But we are presenting these facts in relation to the operation and the various practices that grow up in these holding-company systems, where a holding company will have innumerable subsidiaries and they will have affiliated companies and all of that, and all dealing with each other and making charges, and so forth. We think that the same evils, the same practices that were present with respect to the utility industry, are in large measure in vogue certainly more or less in various other industries, and that a proper subject for the consideration of this committee is as to whether or not the holding company should be banned in other industries, or curtailed or regulated, or some action taken with regard thereto.

Now that is the purpose of presenting this picture.

Furthermore, it may be stated that there have been other beneficial results flow from the disclosure of the facts presented. For instance, numerous State utility commissions have taken that as a basis and have effectuated reductions in price of services to the public. Many of the companies have, as the result of investigation, undoubtedly voluntarily terminated some of the practices that were engaged in, and in many instances are said to have voluntarily reduced rates, and so forth.

Our reports undertake to evaluate the amount of those reductions that resulted throughout the country from the time that the investigations commenced until we made our final report, and they go into very high figures.

With that explanation, Mr. Chairman, I would like for Colonel Chantland to proceed with his statement.

Colonel CHANTLAND. Mr. Chairman, gentlemen of the committee, you appreciate that with the Commissioner's very able summary of this report, I might perhaps shorten it, except for the fact that I am assuming you desire to insert this report into the record as it stands because it has been prepared rather carefully and makes reference statements and things of that sort, and if there is time I think I should read it in full. You appreciate the fact that Commissioner Davis, for the latter half of the eight years, was in direct charge of this utility investigation and is therefore able accurately to make the summary that he has given you so completely.

On February 15, 1928, the United States Senate, through Senate Resolution 83 of the Seventieth Congress, first session, directed the Federal Trade Commission to conduct an inquiry into and to report on the growth of capital assets and liabilities of public-utility corporations, both operating and holding companies, doing an interstate or international business; the facts concerning the issuance of securities; the extent to which holding companies owned or controlled engineering, construction or management companies; and complete details concerning the operation of holding companies, together with a recommendation as to the legislation, if any, which should be enacted

by Congress to correct existing abuses. In the second part of the resolution, the Commission was directed to investigate and report concerning the propaganda or publicity activities of public utilities, particularly with regard to efforts to influence public opinion concerning municipal or public ownership, or to influence elections of President, Vice President, and Members of the Senate, during a period stated in the resolution.

At first statistical schedules consisting of 225 printed pages was prepared and submitted to the companies for which the information was desired. Many of the companies filed reports in accordance with these schedules, filled them out, but most of these were lost in the fire which destroyed our building in August 1930.

For the most part, then, the data used were obtained directly, by direct examination by the Commission's accountants, auditors, and other representatives, of the corporate records of the utility companies and their files, including contracts, correspondence, corporation minutes, stock transfer books, accounting records including vouchers, and so forth. Engineering examinations were also made among the more important groups for the purpose of securing first-hand information concerning physical condition and managerial efficiency. Data were also procured from State public-service commissions to some extent and other State agencies, from Federal income-tax returns, from the Federal Power Commission, and from proceedings before public-service authorities and the courts.

Upon completing the examination of a company's records, the Commission's examiner who conducted the investigation of that particular group or company prepared a report covering the material procured. Conferences were then held with representatives of the companies, covering the material procured after it had been submitted to the companies for checking as to facts. This was for the purpose of eliminating any possible fact errors. The report, together with the pertinent exhibits, were then formally put into the record at a public hearing as directed by the resolution of the Senate. The examiner who prepared the report testified in explanation and interpretation of his report, and, on some important financial transactions, company employees conversant with them were also called to testify, and the company involved was permitted to be, and was represented by counsel and had the privilege of cross-examining, and the opportunity was also given to the companies to introduce any pertinent testimony or evidence which they desired to present. May I here interpolate that the record is full of expressions, when we were through with them, of entire fairness in treating them in the whole matter; that appeared repeatedly after Judge Dal and those of us who were in this had, gone down the line with them, as we felt, rather thoroughly.

The accuracy of the examiner's reports was seldom challenged and in only a few instances did the companies offer any evidence controverting the contents of the examiner's report or his conclusions. Of course the conclusions were our own, that is our own examiners'.

In accordance with the terms of the Senate resolution, the Commission filed monthly interim reports during the 8 years of the investigation except during the summer months. A total of 94 such monthly reports and 7 accompanying reports of exhibits were filed, together with 11 special reports, what we might call a summary or in a sense

final on a topic, as follows: 69-A, 71-A, 71-B, 72-A, 73-A, 77-A, 81-A, 84-A, 84-B, 84-C, and 84-D. So that the committee may understand it, we put the letter after those so as not to break up the sequence of the regular commanded and directed monthly reports. That seems to be a better way of doing it. Some of these will be hereafter explained. All were printed as a part of Senate Document 92 of the Seventieth Congress, first session, and they were also identified by a part or volume number.

UTILITY PROPAGANDA.

Colonel CHANTLAND. I will mention first something as to the propaganda part of the resolution. The material contained in volumes 1 to 20, with the 7 exhibit volumes, which dealt with publicity and propaganda activities and expenditures therefore by the various associations of the electric power and gas industries, was summed up in part 71-A, which was submitted to the Senate on December 12, 1934. A copy of this I have here, consisting of 486 pages, and it is attached hereto and offered as exhibit F. T. C. 205-A, and, as I understand, this is received in evidence but not to be reprinted.

The CHAIRMAN. That is correct. The exhibit is received.

(The exhibit referred to was marked "Exhibit No. 319" and is on file with the committee.)

Colonel CHANTLAND. The material relative to publicity and propaganda activities by utilities groups and companies carried on outside of and in addition to their participation in and contribution to the activities of the various associations was summed up in part 81-A, together with an index to the record on company publicity and propaganda. This was submitted to the Senate on November 14, 1935. A copy of this report I have here, consisting of 570 pages, attached hereto, and offered as F. T. C. exhibit 205-B. This also contains some association propaganda activities that were disclosed subsequent to the filing of the other.

The CHAIRMAN. It will be received.

(The volume referred to was marked "Exhibit No. 320" and is on file with the committee.)

Colonel CHANTLAND. Volume 71-A consists of two parts. Part I states the ultimate objective or the purpose of the activities and methods used in obtaining such objective or purpose, the persons or agencies employed, together with a statement as to how they functioned and were financed. Part II is in the nature of a brief of facts setting forth examples of the activities thus carried on and engaged in. The Commission's representatives examined the files of numerous associations and committees and procured voluminous pertinent data. From this material, representative illustrations were taken, and these were complemented with charts, consolidated tables, and appendices. There are some very illuminating charts made up at the end of 71-A bringing together the activities in the schools, bringing together the hiring of professors and things of that sort, all combined in tables. All of the relevant facts are from testimony, and this should be remembered, and records of the associations, agencies, persons, and concerns of the electric and gas utility industries themselves, on this propaganda phase. The statements and conclusions, therefore, are the declarations and admissions of these associations and the persons

connected with them, or are based on such declarations and admissions and are not hostile testimony, but are really declarations and admissions, so to speak.

The investigation established that since 1919 the electric and gas utilities have engaged in the greatest peacetime propaganda campaign ever conducted by private interests in this country. In addition to using their own agencies, they enlisted outside organizations and personnel in active and often secret aid in their efforts to disparage all forms of public ownership of utilities. All activities in this regard were carefully considered and planned by responsible heads of the industries and their associations and responsible committees. Such propaganda activities were carried on chiefly through the National Electric Light Association, which was the national association of the electric industry, comprising in membership over 90 percent of the industry, and by the American Gas Association, the national association of the gas industry, to a lesser degree in expenditure, which comprised over 90 percent of that industry. State or regional associations were organized to carry out locally the work nationally planned. State committees or bureaus on public utility information were also set up, which were devoted solely to propaganda, and at one time there were 28 of these covering 36 of the more populous States. State directors of these committees were selected for their ability to contact press associations and newspaper men and educators, because it was the declared opinion of the utilities that the press and schools represented the two greatest public opinion forming agencies of the present and future generations.

In the press, the material ran the gamut from harmless and often needless advertising to "canned editorials" furnished to thousands of newspapers throughout the United States, especially the smaller local weeklies. In the schools the material furnished began with a picture book for kindergarten and included insertion of desired material and the elimination of undesired material in books intended as text and research books: Their efforts were thus not confined to affirmative propaganda, but included efforts to block full and fair expression of opposition views, especially in books intended for school and research work.

The variety of this activity carried on was well illustrated by the testimony of Mr. Oxley, the National Director, when we went over that with him, and he conceded that the propaganda ran the gamut, and used everything except sky writing—they didn't hire that.

In addition to general press publicity, the utilities carried on propaganda through a number of subsidized publicity agencies. In some instances newspapers or a controlling interest therein, were acquired. The National Electric Light Association formed various committees for contacting and cooperating with other industries and with many associations. In this manner, agencies such as the United States Chamber of Commerce, Kiwanis, Rotary, Lion's Club, women's clubs, and many others, were utilized to aid the utility program. Repeated attacks were made on every outstanding public project, whether existing or contemplated, for example the Ontario hydro-electric system, Muscle Shoals, and Boulder Dam, and may I here again interpolate, that in the Ontario situation they published a series of books, and as soon as one was assailed another book was issued, and the matter in the former book was quoted as though it had stood

unchallenged, until they thus built up a line of authority, each of which had been discredited.

As indicated by the sales of their security issues in the period from 1923 to 1929, the utilities by such propaganda built up a belief by the general public in the soundness and value of all security issues of privately owned utilities, and I think, Senator, you will remember the brief that was submitted to the Senate Interstate Commerce Committee signed by some 190 lawyers, in which they set forth as a reason why this investigation should not take place that the whole situation was sound. It was rather amusing after the disclosures.

May we insert the remark that the assertion of soundness and one reason for such soundness, viz: alleged complete and sufficient regulation by the States, was made in a printed brief submitted to the Senate committee, to which I have just referred. It consisted of 261 pages and was in support of the contention of the utilities that the proposed investigation was unnecessary. This is in the Commission's record as exhibit 924. We do not have a spare copy of it, but it was filed with the Senate Committee at the time. Billions of dollars of nominal value of securities were issued, often with little or no regard for the underlying soundness of or necessity for such issues. The years of propaganda activity undoubtedly proved a powerful aid in having made the general public utility-conscious. Boastfully, Mr. Aylesworth, then the managing director of N. E. L. A., set forth as a reason why such a Nation-wide and expensive propaganda program should be pushed for the utilities, that the "public pays"—that is, that the rate-paying public paid the bill.

To measure accurately what the investing public lost in these issues is impossible, due to other factors, including the depression, and to the further fact that no one has ever assembled the varying prices and amounts paid for such security issues, but the amount of loss caused in whole or in part by such extensive and reckless issues was very great indeed, certainly running into the hundreds of millions.

Part 81-A dealt with the propaganda and publicity of 16 groups and their companies, carried on outside of and in addition to their participation in and contribution to the activities of the various associations reported in part 71-A, and, as I said, containing some association propaganda uncovered subsequently.

It was found that most of the propaganda carried on by the holding company groups or local operating companies was in harmony with and in pursuance of the general plan made and carried on by the various associations and committees (National and State) of the electric and gas industries. Some groups had quite complete intra-system propaganda organizations, similar in general character and functioning to the associations of the industries. The associations furnished material either voluntarily or upon solicitation of the companies, and the latter distributed these locally. This scheme, whereby the associations produced the propaganda and the groups or individual companies distributed it, was very effective and in general use throughout the United States.

Schedules and exhibits were included in the report which showed the amounts expended by the various groups and companies for advertising; their contributions to other trade associations; fees, retainers, and other payments to attorneys, to educational institutions, and to professors and teachers; and contributions to the national

committee of the two major parties which were made by persons connected with these companies.

FINANCIAL STRUCTURE, PRACTICE, RATES, AND RETURNS OF PUBLIC UTILITIES

Colonel CHANTLAND. I will pass now to the financial phase of the holding and operating companies of electric and gas utilities. On January 28, 1935, the Commission submitted to the Senate chapters XII and XIII of a summary report with recommendations, on holding and operating companies of electric and gas utilities, consisting of 218 printed pages. This report was published as Senate Document No. 92 (pt. 73-A). I have a copy of it here as Commission's exhibit 205-C, for this investigation, which I presume will receive the same treatment as those previously offered.

(The report referred to was marked "Exhibit No. 321"; and is on file with the committee.)

Colonel CHANTLAND. This report, together with 69-A and 84-B covered a survey of State laws and regulations, certain pertinent legal studies, the present extent of Federal regulation and the need of Federal legislation, together with conclusions and recommendations. In 69-A there are two parts, one a compilation that we gathered together, that I think perhaps had a special interest for the Senator at the time, and now has—a compilation of proposals and views for and against Federal incorporation or licensing of corporations, and compilation of State constitutional, statutory, and case law concerning corporations, with particular attention to public utility holding and operating companies.

(The report referred to was marked "Exhibit No. 322" and is on file with the committee.)

Colonel CHANTLAND. The exhaustive study made by the Commission established that no substantial progress was being made by the States generally toward effective regulation of holding companies. In a few States efforts were made, but generally the situation remained as it was 25 years earlier. The power of the States in regulating holding companies was handicapped by nonresidence and the interstate character of their business, and other causes. Then, too, certain of the States granted roving charters with practically unlimited powers, thereby leaving the States in general quite helpless.

The holding company, as such, performs no producing function. In the utility field it has not, therefore, been subject to regulation as such. Charters were granted to operating utilities to perform general public utility service, but as a result of holding company control and management, many operating companies contracted away their charter duties and real performance of their principal charter functions to the holding company or to other companies designated by the controlling holding company, thus ousting practically all State jurisdiction over the business. The opinion was expressed that appropriate Federal legislation would remedy this situation. The Commission further stated that there appeared to be three methods which seemed to commend themselves for the exercise of Federal jurisdiction: (1) The taxation method; (2) direct statutory inhibitions with penalties; (3) a compulsory Federal licensing act, coupled with a permissive Federal incor-

poration act. These methods are explained in detail at pages 67 to 75, inclusive, of part 73-A, that I have already presented here.

On June 17, 1935, the Commission submitted to the Senate chapters I to XI (preceding 73-A already referred to), being a review of the record with regard to the economic, financial, and corporate phases of holding and operating companies of electric and gas utilities. The reason they are in this order, although this precedes the other one is that we were able to complete the one before the accounting work could be completed.

This report, which is devoted to the electric-utility group and some manufactured gas-utility groups, consisted of 882 printed pages and was published as Senate Document 72-A and is here offered as 205-D.

The CHAIRMAN. It may be received under the same conditions.

(The report referred to was marked "Exhibit No. 323" and is on file with the committee.)

Colonel CHANTLAND. During the earlier expansion period of electric-utility services, occurring about 1905-10, and especially in the period after the World War up to 1930, when war-profit money was seeking an outlet, the utilities seemed to offer an especially inviting and lucrative field, with their mere sporadic and ineffective State regulation. The public-utility holding company then became an active and dominant influence in utility development, although—I am talking now about electric and gas utilities—there continued to be numbers of small independent companies. The functions, variously and in varying degrees, performed or claimed to be performed by many holding companies, which were asserted as advantages for this type of structure were (this is what they were claimed): obtaining funds from investors which probably could not be obtained by small independent companies, supplying the advantages of large-scale production, skilled management, and expert engineering; and extending and improving service, with attendant increases in consumption and decreases in production costs, which make lower rates possible, although accompanying unsound financial practices often constituted aids to maintaining rather than reducing rates. Even when some or all of the economies claimed were in fact brought about, no substantial rate reductions to the public occurred. The usual result was a siphoning off of the earnings so resulting into the holding-company coffers.

Among the evils of the holding-company management were pyramiding, attended with the issuance of highly speculative securities, enabling a few men to gain practical control of vast utility empires, with a minimum of investment; the exaction of various kinds of excessive fees from controlled operating companies; inflation of capital structures accompanied by pressure to obtain earnings on inflated values at the expense of the rate-paying public, because of course that was practically the only source from which the money came into the till; objectionable, misleading, and nonrevealing accounting practices, maintaining fictitious prices on their stocks through manipulations of the market; retaining excessive funds collected from the operating companies as purportedly required for Federal income taxes; and impressing their activities with an interstate character for the purpose of escaping and avoiding whatever State regulation existed or was attempted. This last point is especially illustrated by a number of cases in volume 73-A, beginning at page 79.

FINANCIAL ACCOUNTING PRACTICES OF UTILITY COMPANIES

Colonel CHANTLAND. More specifically as to the financial and accounting practices, the assets of large utility systems which were built up through acquisitions of independent operating companies and their subsequent unification through consolidation and merger and related construction, reflected large amounts by which they were written up in value in one way or another in the process. Write-ups, improperly capitalized intangibles, and inflation in the fixed assets of all of the holding, subholding, and operating companies examined, so far as disclosed, were found to aggregate approximately \$1,500,000,000 at the final dates of examination.

Some examinations were made subsequent to that so that even our total is not in the table thus shown, and we do not claim to have discovered all of them nor to have examined all the companies.

A large part of the write-ups reflected the capitalization of the additional earning power which was presumed and anticipated through the consolidation and merger of acquired independent operating companies by whatever economies might be affected and to any future economic growth in the community or territory served. Often this reflected nothing more than the optimistic judgment of the promoters or the result of a so-called horseback appraisal, that is, a superficial inspection of the properties by their engineering staffs.

The merged or consolidated company was required to issue, directly or indirectly, its common stock or other securities to the controlling interests in exchange and consideration for the assets of the constituent companies at their increased values. The sale to the public of the nonvoting stocks and long-term debt so issued by the new company permitted those in control to reduce their investment and in some instances to recover all of it, and in extreme cases more than all of it, and still to exercise the same degree of control over the properties through the retention of the new companies voting common stock which emanated from the write-up, and cost the controlling interests little or nothing.

In some instances utility operating companies employed appraisals and revaluations as a basis of writing up the values of capital assets. As contrasted with the more common forms of write-ups encountered as referred to above, the write-ups based on appraisal, which in many cases resulted from State regulatory commission orders in connection with rates and other matters, were credited for the most part to capital surplus or retirement reserve.

Numerous appraisals made of the properties in the Associated Gas & Electric Co. system resulted in an appreciation of fixed assets of approximately \$83,000,000 in that one system; and here is the strange thing, that these appraisals were made by E. J. Cheney, who was supposedly an independent appraisal engineer.

It was developed by our examiner that Cheney had been operating in the interest of and under the control of H. C. Hopson, vice president of the Associated Gas & Electric Co., who, together with Mr. Mange was in full control of the system, and could not have been considered in any sense as having an independent professional status.

There were other similar cases, none perhaps so bald.

Other forms of write-ups reflected the capitalization of large profits taken by holding companies in the performance of construction work

for their operating subsidiaries, the capitalization of stock and bond discounts incurred in connection with security issues, and the appreciation of capital assets through failure to remove the value of property retired from service.

We found in the big Insull group, I forget how much but it was in the millions, that hadn't been used for a long time but was still carried, and we found that in many instances.

In a part of the subsidiaries of one large holding-company system which was in receivership, the accountants discovered that over \$18,000,000 of worn out and abandoned property was carried in the property account. Yes; that was the Insull illustration.

In connection with mergers and consolidations, the investigation developed instances of reorganizations, of what it appeared that the principal purpose was to avoid the payment of Federal income taxes. These instances involved United Gas Improvement Co., Associated Gas & Electric Co., certain Insull companies, Halsey, Stuart & Co., American Superpower Corporation, and the United Corporation. I recall one instance where a \$9,000,000 item was carried through in that way, in a trade between Associated and United. These companies entered into complicated usually intersystem transactions in securities involving large sums in which the payment of taxes on the profits was avoided.

Certain holding-company groups carried on a process of actively buying its own securities on the organized exchanges, while they were being sold to the public through other channels. During the 3 years and 9 months from April 21, 1927, to December 31, 1930, one holding company group sold 41,488,512 shares of its common no-par stock to the public for \$1,146,518,779.19. During the same period its purchases of this stock on the exchanges amounted to 34,057,929 shares at an expenditure of \$965,710,037.65. That is, in order to make a net issue of less than 5,650,000 shares this company effected sales more than seven times as great and purchased simultaneously a volume nearly six times as great. If there could be an example of attempting to rig a market, that would be it.

Company purchases constituted a large proportion of the total transactions on the New York Curb Exchange. For example, from April through mid-October 1929, company purchases ranged from 54.6 to 99.6 percent of the total sales on the curb and averaged 72.9 percent for the 6½-month period. This buying demand furnished by the company and the general public, plus the influence of the speculative demand for utility stocks, led to an increase in the closing curb price from \$28½ per share on June 9, 1924, to \$46½ July 19, to \$52 September 2, and \$68 on October 15, 1929. Then followed the crash and they went down to \$1, \$2, \$3, and \$4, if I recall rightly.

Pyramiding of holding companies, subholding companies, sub-subholding companies, and so on, upon the operating company was found to be carried to a very attenuated pinnacle. In one holding-company group there were 10 companies in one line of control from the top to the bottom of the pyramid.

I have some typewritten copies of this illustration. I will pass that to the committee. I think that might be printed right into the record at this point, Senator, if it is not too long.

The CHAIRMAN. Without objection, it may be so ordered.

(The chart referred to was marked "Exhibit No. 324" and is included in the appendix on p. 2178.)

Colonel CHANTLAND. The sample that I have just now offered is part of the situation. That can be traced out from this large chart, F. T. C. exhibit 5160, that is in our records.

(F. T. C. chart 5160 was marked "Exhibit No. 325" and is on file with the committee.)

Colonel CHANTLAND. At the top of this (referring to "Exhibit No. 325") you see Hopson and Mange because they were in complete control, but follow the right lines around here and you will have exactly what you have on the typewritten sheet, that is 11 in the tier. You find the last one there, Patchogue, around in here (indicating). That is a chart of the Associated Gas system at one moment, and that is all I can say. The Associated system changed from day to day, maybe. In other words, there may have been 11 here that day and the next day there may have been less, but they changed very rapidly.

I can give you the illustration of a beautiful holding company up in the State of New York, the General Gas & Electric. If there was an example of a fine holding company with one tier of operating companies, it was perhaps that. You and I perhaps had a little stock in that in the evening and relied on our holdings in the operating company; we were close to it, but the next morning we had the same stock but we didn't have any stock in those operating companies. They had switched our interest in those companies over into the Associated system somewhere else and put back into this company, in which we had stock, General Gas & Electric, merely some created stuff in the system that was a tenuous equity in nothing. That is what we had the next morning and we had nothing to say about it. Of course, the story isn't all told yet.

In the Insull system, I will show you a little bit there at the same time. I submit this to be placed on file.

The CHAIRMAN. The chart may be admitted without printing.

(The chart referred to was marked "Exhibit No. 326" and is on file with the committee.)

Colonel CHANTLAND. This chart shows you only the top Insull companies, beginning with the voting trustees, and the various corporations, carried down to where we begin to get the subholding companies. We carry around through here (pointing to "Exhibit No. 326") down to the Middle West Utilities Co. and the Midland United Co. Remember that we have four tiers there.

Now I will show you a chart that gives what is in this sub-holding-company group only. Presto! That is it. I think if that could go in the record, it would be well.

The CHAIRMAN. It is received.

(The chart was marked "Exhibit No. 327" and is on file with the committee.)

Colonel CHANTLAND. That is just one of them.

In the next chart, without opening it, is a similar thing for the Midland United. If there is any justification that anyone has thought of yet for such a maze as the two samples I have shown, we haven't heard it.

In the Insull system in which all of the holding and subholding companies became bankrupt or went into receivership, there was a pyramid, as you will find there. I think it went as far as 9, some of them

8, some of them 7. Through the device of a pyramid of holding companies the controlling interests were able to control a vast chain of operating companies with a minimum of investment. For instance, in the Insull tier pyramid, \$1 of investment by the Insulls controlled \$2,000 of investment in the West Florida Power Co. a common-capital structure consisting of 50 percent of 5 percent bonds, 25 percent of nonvoting 6-percent preferred stock, and 25 percent of common stock for the operating company, and 50 percent of nonvoting preferred stock and 50 percent of common stock for each holding and subholding company in the pyramid.

Those were typical methods of setting it up. In prosperous times when the operating company made 8 percent on its total investment, in a six-company pyramid having no write-ups the earnings available for the first holding company would be 25 percent on the common stock and on the apex company 295 percent, but earnings of 5 percent on the operating company's total investment would leave only 5 percent for its common stock, only 1 percent for the common stock of the first holding company and nothing for the four other holding companies in the pyramid.

You will find the charts setting forth that in the record as mentioned in a footnote.

The earning statements of a number of companies contained many fictitious items of income. For example, preparatory to its refinancing in 1929, Middle West Utilities Co.—that is the one chart I have just handed you, that long one—the principal Insull holding company, began paying dividends on its common stock in 1925. From 1922 to 1928, inclusive, the Middle West annual reports showed \$16,000,000, nearly \$17,000,000, of income available for common-stock dividends. Now that is the book showing. During the same period it included in its income \$16,781,100 of fictitious income as profit on sales and exchanges of securities among the companies in the Middle West system, and from revaluations of securities and properties owned; in other words, trading back and forth at a set-up and mark-up of values that had no basis, not an item of new assets came in—I mean not a dollar of new items—when those were made. Cash dividends amounting to \$8,843,000 were paid in the period from 1925 to 1928. It is evident, therefore, that if amounts claimed as profit on sales, exchanges, and revaluations of securities and properties were illusory, there was little or no income available for dividends on common stock and such dividends were paid out of capital; without the dividend record the company could not have sold common stock to the public, and, of course, that was the purpose of doing it under the complete State regulation that the people believed and as represented to the Senate that there was, which amounted to nil.

The undistributed earnings of prosperous subsidiaries were often included in the earnings of holding companies although such subsidiaries had not declared any dividends out of the earnings nor set up any obligation on their books to pay anything to the holding company. Now, mark you, not a step had been made to move this up in there and yet the holding companies took it in as though it was there. This practice was wholly indefensible, both legally and as a matter of correct expression of business transactions, and resulted in misleading financial statements for individual companies in the holding-company system in that the surplus was improperly duplicated

in the accounts, both claim agencies being at one and the same time in the accounts, being at one and the same time recorded in the books of the subsidiary and the holding company. The earnings so taken up by the holding company were considered as valid assets but in some cases they were never realized due to receiverships.

The investigation disclosed that a substantial source of net income to many holding companies, either directly or indirectly, was the fees collected from subsidiary or affiliated operating companies for financial, management, and engineering services and other supervisory charges. In many cases the actual services rendered under the service contracts were questionable and the fees collected were high and frequently extremely high in relation to cost. For example, the Associated Gas & Electric system, in a little more than 5 years, had a net income of over \$6,500,000 for management and construction service alone, or 193 percent net profit on service cost, and in addition had servicing income on merchandising, purchasing, and other services.

Byllesby Engineering & Management Corporation, servicing the Standard Gas & Electric group had a total net income for 11 years, of over \$17,000,000, derived almost wholly from servicing. Nearly all of this amount was distributed in dividends to its one stockholder, the Standard Gas & Electric Co.

Here is one: In Senate Document 213, Sixty-ninth Congress, second session, which is a report by the Federal Trade Commission on the control of power companies, directed at that time to find out whether there was a monopoly in electric power (that was the time the General Electric parted with its electric properties and they were set up as the Electric Bond & Share Co.), on page 75 of that report, our Commission solemnly reported as follows:

The Electric Bond & Share Co. states that the general service fee just about covers the cost of the service.

Please remember that at that time, for some reason, we were not given access to the files, so we accepted that statement, which was made to one member sitting here and one member who was here this morning by responsible officials of that company.

Referring to engineering they stated, and the Commission so reported to the Congress:

The fee, the company asserted, consists of the total of the costs thus recorded.

As to construction the Commission reported:

The company states that the fees just about cover the expense of the construction companies.

It summarized the matter as follows:

From the foregoing account it will be seen that the Electric Bond & Share Co. regards this service staff as an auxiliary organization that does not directly produce for the company more than a nominal profit.

I am quoting from the Federal Trade Commission's report to the Congress, and we usually aim not to make misrepresentations.

But let's see now. Having gotten into the books, after lawsuits, however, following court action undertaken in the last investigation to overcome refusal of the company to give access to its records in the utility investigation (the latter one, the one we are talking about now) and two decisions, the examination disclosed that the profits were far from merely nominal. In most instances they ran over 100 percent,

in one instance 269 percent, and they aggregated millions—not a nominal matter. These profits were after most liberal salaries had been allowed as the major items of expense, all of which will be found in the record of the investigation, part 62, at 330 and 332 to 334 in exhibit 5602.

During a period of 5 years, Columbia Engineering & Management Corporation collected fees from the affiliated Columbia Gas & Electric group for engineering and management services amounting to nearly \$15,500,000, on which it incurred expenses of slightly over \$7,500,000, realizing a net profit on the cost of servicing of 106 percent.

W. S. Barstow & Co., Inc., and its subsidiary, W. S. Barstow Management Association, both servicing organizations for affiliated companies, had a combined net income for a period of 4 years and 9 months of \$4,400,000, or 321 percent on expenses. Of this total net income, \$2,122,000 was distributed to 15 officers and employees as so-called "extra compensation,"—quite extra—and in addition 1 of the 15 received \$650,000 under an income-sharing contract, the latter individual receiving almost one-fourth of the total net income under these two forms of extra distribution.

Service fees were collected from operating subsidiaries for many services, such as accounting, advertising, engineering and construction, legal, merchandising, financing, purchasing, and general management.

Just to sum up a bit, it is generally conceded that this inquiry contributed materially to the passage of the Securities Act of 1933, the Holding Company Act, the Securities and Exchange Act of 1934, and the Federal Power Commission Act of 1935, and the Natural Gas Act of 1938, and also that as a result of the disclosures of exorbitant rate bases and rates, the whole utility rate structure was permanently lowered to the extent of many millions of dollars per annum, although of course, in that inquiry we couldn't go into the examination of rates as a primary proposition, and were not so commanded.

Let me pass, now, to the natural-gas-producing, pipe-line, and utility industries.

On December 31, 1935, the Commission submitted to the Senate its final report covering economic, corporate, operating, and financial phases of the natural-gas-producing, pipe-line, and utility industries, with conclusions and recommendations. It consisted of 617 printed pages and was published as Senate Document No. 92 (pt. 84-A), of the Seventieth Congress, a copy of which I have here and ask that it be received as the others have been received.

The CHAIRMAN. The exhibit may be received in the same manner.

(The volume referred to was marked "Exhibit No. 328" and is on file with the committee.)

Colonel CHANTLAND. The report dealt with a number of evils that had been found in the natural-gas and natural-gas pipe-line industry, and I keep repeating the two because they are separate things, the correction or prevention of which would, in many instances, require extension of regulatory authority over the industry. Among these evils were some 16 that have been enumerated here.

Shall I read them, or shall we put them into the record?

The CHAIRMAN. They may be put into the record.

(Following are the 16 items referred to:)

1. A great waste of natural gas in production.
2. Excessive cost of natural-gas production through extravagant competition in drilling wells.

3. Unregulated monopolistic control of certain natural-gas production areas.
4. Unregulated control of pipe-line transmission and of wholesale distribution.
5. Discrimination in some instances in field purchases of natural gas, and refusals to purchase from independent producers.
6. Unregulated competition in building natural gas pipe lines to markets.
7. Costly struggles between rival natural-gas interests to conquer or defend territories of distribution.
8. Excessive and inequitable variations in city gas rates for natural gas among different localities.
9. Pyramiding investments in natural-gas enterprises through holding companies, with attendant evils.
10. Excessive profits in many natural-gas sales between affiliated companies.
11. Inflation of assets and stock watering of certain natural-gas companies.
12. Misrepresentation of financial condition, investment, earnings, etc., of some natural-gas operating and holding companies.
13. Reckless financing and stock manipulation by certain natural-gas holding companies.
14. Exploiting subsidiary natural-gas companies through fees for construction, management, promotion, etc.
15. Exaction of excessive bonuses or commissions by investment bankers in connection with financial transactions with natural-gas companies in certain instances.
16. Exaction of excessive fees and bonuses or commissions by officials of certain companies in connection with sales and construction of properties.

In order to correct these existing evils the Commission, in 1935, among other recommendations, suggested: (1) Measures for real conservation and use, including equitable ratable taking, or otherwise protecting all interests in a common reservoir. But such laws must be carefully drafted so as not to result merely in the lengthening and strengthening of the hold of the larger and dominant interests, and to the detriment and elimination of the very numerous smaller projects. The Commission specifically warned against the danger that laws enacted in the name of conservation might prove merely to be the means of lengthening and strengthening the control of the dominant companies and groups, and for that reason divorcement of certain functions within companies and groups in each industry deserves serious consideration as affording a most likely effective remedy.

The second recommendation: That a Federal regulatory law be enacted applicable to interstate natural-gas pipe lines which transport gas for ultimate sale to and use by the public, regulating rates for carriage or city gate rates at the end of such transportation; also regulating security issues, accounts, beginning and abandonment of operations, and intercorporate relations of companies owning or controlling gas pipe lines; retail rates for gas transported and delivered in interstate commerce to be federally regulated only where they are not regulated by the State in which the gas is distributed to the public.

3. That a Federal agency be empowered, insofar as it may lawfully be done, to order all reasonable extensions of service to communities desiring natural gas which can be supplied by companies which transport gas for public consumption, without undue disturbance of existing service requirements.

4. That there be a divorcement of gas and electrical utilities because of the fact that they are increasingly competitive, and in many communities are the two chief sources of power and light, and further because three of the four dominant interests in natural gas and natural-gas pipe lines are also large in the electric utility field.

The fifth recommendation: That Federal and State legislation be adopted which will restrict banks to investment in, and shall forbid their control and management of, utilities.

In substance, (2) and (3) were incorporated in the Natural Gas Act of 1938. This part of the summary has been also abbreviated for the reason that later on there will be a further presentation on natural gas.

FEDERAL INCORPORATION OR LICENSING OF CORPORATIONS

Colonel CHANTLAND. In conjunction with its investigation of utility corporations, the Commission caused a compilation to be made of proposals and views for and against Federal incorporation or licensing of corporations. This report was divided into two major parts, one covering the period prior to the enactment of the Federal Trade Commission and Clayton Acts in 1914, and the other including the material subsequent to that date. The topics covered included official and personal expressions and views, proposed legislation, party platforms, viewpoints with regard to constitutional amendments, and the attitude of the press. That is in volume 69-A that is now in here as exhibit 205-F.

In the same volume, a compilation was also made of State constitutional, statutory, and case law concerning corporations, with particular attention to public utility holding and operating companies.

As I have already said, that was transmitted to the Senate on September 21, 1934.

Part 84-D of the reports, not here, is a comprehensive general index of parts 21 to 84-C, inclusive. Parts 71-B and 81-A, pages 259 to 570, are indexes to the propaganda.

That gives the explanation of the lettered volumes.

In closing, it seems proper to remind the committee that not all of the groups and companies either in the electric or gas and gas pipe line industries were examined. The funds, personnel, and time allotted did not permit. Nor is it claimed that all unsound issues were discovered and reported. Therefore, the aggregates are to that extent less than the actual totals for the entire industries. As to some of those that were examined, complete records could not be obtained, so that full disclosure has not been made. In at least one instance, desired books and records were said to be in Canada.

Mr. FRANK. As I understood him, Commissioner Davis has pointed out that as a result of the studies made by the Commission there was enacted the Public Utility Holding Company Act of 1935.

Colonel CHANTLAND. I don't suppose we can claim 100 percent, but probably we ought to have some credit.

Mr. FRANK. Congress itself recognized that fact, for in section 1 (B) it referred to your report.

In that Act utility holding companies are forbidden to do many things. In some instances they are flatly prohibited to act and in others they may act only pursuant to orders, rules, or regulations of the Securities and Exchange Commission.

I want to call your attention to a device that is recurrently used in that Act by Congressional Mandate. For instance (and I am simply picking out one of many such provisions), it is provided that the Commission, upon application by a holding company, shall by order declare that a company is not a holding company if the Commission finds certain facts. The findings of the Commission can only be upon an order and after a notice and hearing. At that hearing persons may intervene, including state or local governmental agencies, persons showing an interest in the company, or a public or consumer interest.

The statute provides that as a condition to the entry of such an order granting such an application and as a part of any such order, the Commission may require the applicant to apply periodically for a renewal of such order and to do or refrain from doing such acts or things in respect of voting rights, control over proxies, designation of officers and directors, and other matters, and to submit such periodic or special reports regarding affiliations or intercorporate relationships of the applicant as the Commission may find necessary or appropriate to insure that in the case of the applicant the conditions specified in the statute, as a basis for finding that it is not a holding company, are satisfied during the period for which such order is effective. The Commission, upon its own motion or upon application of the company affected, is to revoke the order declaring such company not to be a holding company whenever, in the Commission's judgment, any condition (specified in those clauses to which I have referred and which are set out in the statute) is not satisfied in the case of such company, or the Commission may modify the terms of such order whenever in its judgment such modification is necessary to insure that in the case of such company the specified conditions are satisfied during the period for which such order is effective.

Colonel CHANTLAND. Mr. Commissioner, in the definitions "holding companies" mean "utility holding companies."

Mr. FRANK. Utility holding companies. The statute also provides that no provisions of the statute imposing any liability shall apply to any act done or omitted in good faith in conformity with any rule, regulation, or order of the Commission, notwithstanding that such rule, regulation, or order may, after such act or omission, be amended or rescinded or be determined by judicial or other authority to be invalid for any reason.

Now I have simply taken those particular provisions as a pattern; there are numerous other instances in which the Commission by order may determine that a holding company may do certain things which, were it not for the order of the Commission, it could not do. For instance, under section 6, in connection with the exercise of certain privileges granted by the company's charter which would diminish the rights of persons interested, a company is forbidden to act unless it files a declaration; there is then a hearing and the Commission thereafter enters an order finding that the proposed action will or will not be detrimental to investors, to consumers, or adverse to the public interest. Under that Act the Securities and Exchange Commission almost weekly has hearings and enters such "advance" orders. Now I ask you whether those are not advance administrative determinations, in the nature of declaratory administrative findings, which the Congress considered to be perfectly valid and which it assumed could feasibly be employed without injury to consumers or the public interest.

I may add that our Commission has found no difficulty in the exercise of its powers and duties under the statute and that its administrative obligations under that statute seem to be working with full satisfaction to all persons interested. I would like to ask you whether, with your knowledge, gained from your vast study of this industry, you have any reason to believe that such a device is defective?

The CHAIRMAN. Before you answer, may I just intervene and say that it is a riddle in my mind—when is a holding company not a holding company? When the S. E. C. says it is not.

Mr. FRANK. When the S. E. C. acts pursuant to statutory standards carefully stated in the statute by the honorable body of which the Chairman is a member. I assume he voted for that statute and was familiar with its terms when he voted for it.

The CHAIRMAN. I voted for it, but whether I was familiar with it is a question.

Colonel CHANTLAND. Of course, Mr. Frank, I may have personal views on this proposition of declaratory judgment that are not in accord with some of those expressed here, and I think you are as capable of answering your own question as I am, so I don't see any point in pursuing it.

The CHAIRMAN. Seriously speaking, I wonder if there has been a definite pattern in the judgment and rules which the S. E. C. has rendered under these sections.

Mr. FRANK. There has been. Congress was careful to set forth the standards. Those standards, however, must be applied to a multitude of specific circumstances. A body of precedents, of course, is being built up.

My question, addressed to Colonel Chantland, was perhaps unfair; it was intended as a rhetorical question rather than as one to elicit information.

Colonel CHANTLAND. I rather assumed that. I didn't mean to be making a facetious answer.

Mr. FRANK. I used what was sort of a subterfuge for presenting to the Committee the fact that, since the enactment of the Anti-trust Act and the Federal Trade Commission Act and the Clayton Act, Congress has, with great particularity, in this piece of legislation which resulted in large part from the work of the Federal Trade Commission, seen fit to provide for advance administrative rulings.

The CHAIRMAN. Isn't it a fact, however, Mr. Frank, that the Public Utility Act was a compromise in effect between what Congress, what the Interstate Commerce Committee of each House, desired, what the Federal Trade Commission recommended, and what seemed to be the demand of investors throughout the country, or those who thought they were investors, who felt that if these recommendations were thoroughly carried out the whole house of cards would be brought down about our ears, so that it was necessarily decided to set up this sort of procedure so as not to completely wreck the system.

Mr. FRANK. No doubt that was the congressional purpose. What I wanted to indicate is that it is possible to have this kind of advance ruling which seems to be adequately protective of all the interests, namely, not only those of investors but of the public interest and of consumers, for those interests are designated in the statute in various sections. The hearings are very detailed; the staff of the Commission prepares an immense amount of data; after the hearing there is an argument unless the parties desire to waive it. The Commission, with that data before it (I hope, earnestly and patiently and adequately) considers the facts, and makes determinations upon which citizens may rely. There is a provision for judicial review by persons aggrieved. If someone has been aggrieved, the matter can be taken into a court.

I also want to indicate that there is provision for experimental orders. That is, the orders of the Commission may provide for ter-

mination if, upon investigation or subsequent disclosures, the orders appear to have been mistaken.

I might call attention to a recent regulation that the Commission has issued, pursuant to certain sections of the statute, which relates to the fees of underwriters and finders in certain circumstances; it puts a kind of burden of proof on them where they are affiliated in certain ways. To avoid the difficulty that an underwriter may have expended a great deal of time and money and then find that he is unable to procure his fees, the Commission (we think, acting in accord with the statute) has provided that—

In appropriate cases the Commission upon application may make a finding or render an opinion for purposes of this paragraph in advance of any issue, sale, or acquisition of any security.

We have a case now pending where a proposed underwriter has come to us. We are investigating the facts thoroughly to see whether he will offend the standards of the statute. If we say "no," then, unless he appeals, he cannot act; if we say "yes," then he can proceed. If he proceeds in a manner that deviates from the order, then we will find he is not entitled to his fee.

The CHAIRMAN. Would it be possible, Mr. Frank, that 4 or 5 years hence, when possibly the personnel of the Commission might be altogether changed, an utterly different decision could be rendered in another case upon a very similar state of facts with respect to whether or not a holding company was to be prohibited or not?

Mr. FRANK. I have no doubt of that, and that is something inherent in human nature. There is a possibility of differences of opinion. There is always present the fact of human fallibility. That is true of our courts. That is true of any determination by any human being.

The CHAIRMAN. The thought that comes to my mind—and this without any intention at all to reflect upon the Federal Trade Commission—that the Federal Trade Commission from 1914 to 1921 was one sort of a Commission, but from 1921 down to 1933 it was an utterly different sort of a Federal Trade Commission; and though these gentlemen who are testifying here today in most instances were on the staff of that Commission throughout that period, their activity was controlled by the policy-making power of the members of the Commission whose point of view and whose purposes changed with the administration.

Mr. FRANK. Certainly; that same thing is true of any prosecutor's enforcement of any statute, even if the prosecution is not vested in an administrative body. The personal perspective, background, characteristic outlook, or whatever you choose to call it—we can pick many words out of the thesaurus to describe what we are getting at—those same factors are found in the Department of Justice.

The CHAIRMAN. Exactly.

Mr. FRANK. Under one administration minded to enforce the antitrust laws vigorously, you may find enforcement; under another administration minded not to enforce them, the Department of Justice could go into court, begin a proceeding and agree to a consent decree which would give a complete wholesale exemption to any affected industry. There is no way I have been able to discover—your wisdom is beyond mine—

The CHAIRMAN (interposing). I would hesitate to say that.

Mr. FRANK. By which the vicissitudes of human nature can be controlled by legislation. Government officials having such powers must be impressed by their own inward restrictions and by the outward pressure of public opinion.

The CHAIRMAN. I think we might agree on that. I have repeatedly stated that the success or failure of the antitrust laws as we have had them has depended too much upon the diligence and the point of view of those who happen temporarily to be in the Department of Justice. If we happen to have a vigorous and active head of an antitrust division, we have a certain type of enforcement. If, on the other hand, we have a head of the antitrust division who is not so vigorous, we have an utterly different sort of enforcement.

That, I feel, is largely due to the fact that our antitrust laws to date have either by their interpretation of the court or by express language, lodged discretionary power in the courts or in the commissions. That is the specific fact which has led me to the conclusion that the satisfactory way of solving this problem of preventing restraints of trade is to do it by means of the charters of the corporations which carry on the trade. I don't believe that you are ever going to succeed by personal government, by personal power, by personal enforcement of particular personal desires, and that the only possible success can be attained by clearly writing into the charters of these corporations—that is to say into their contracts with the people—the powers which they shall have. And by these charters to withdraw from corporations the corporate power to commit the abuses which the entire experience of the American people has proven beyond any possibility of contradiction are bad upon the economic affairs of the entire people.

Mr. FRANK. Senator, I wouldn't attempt to dispute with you because you have thought this over a great many hours and days and weeks, and my own inclinations are to agree with you to a very large extent. And yet I find this difficulty: Whether the inhibitions be put in charters, statutes, criminal laws or whether their enforcement be sought through civil penalties, some human being has to see that there is no violation of the matters that are prohibited.

Now putting prohibitions in a charter will not prevent violations of the provisions of that charter unless somebody, whether he be a private person or a public agency, or a prosecuting officer, designated by statute, sees to it that those provisions are not violated. The books are full (sometimes the law books, sometimes the court reports, sometimes reports of investigatory bodies) of instances where plain unmistakable provisions of State laws are violated. Only a very small fraction of the instances of violation are brought to judgment before some court which either redresses the wrong by damages or prevents the wrong by injunction. It seems clear to me that someone, somewhere, has to have the power to enforce statutes—unless we turn men into angels so that the mere fact that there is an inhibition in a statute will mean that men, by their own impulses, will comply with it.

It matters not whether the person who enforces the statute is a Government officer or a stockholder or officer of a corporation, someone has got to see to it that infractions of prohibitions in a statute are vindicated. I find it difficult to see how you can avoid vesting

that power in some human being. And once you recognize that fact you must also recognize that if that human being does not exercise that power, violations of the statute will result. There is necessarily involved a delegation of authority to someone. We call it delegation when the enforcing authority is given to administrative agencies; we do not use the word "delegation" when we give that authority to a prosecuting attorney or to a stockholder; but, nevertheless, there is a delegation no matter what words we use. For the decision as to when and whether to enforce the statute has to be made by someone, whether that someone be a department of justice, a prosecuting attorney, or a stockholder. The statute won't enforce itself, if men are minded not to comply. Someone, somewhere, has to have the discretion to enforce laws; whether the penalties be civil, criminal, or injunctive, that is true. We do not usually use the word "discretion" in that context; but yet it is discretion, because there has to be a decision by some person as to whether and when the statute is to be enforced.

The CHAIRMAN. Of course, that isn't entirely correct. It has not been the theory upon which our law has been built up at all. As a matter of fact, the fundamental principle which is taught in every elementary law school with respect to criminal law, for example, is this, that it is better to allow nine guilty persons to escape than to punish one innocent person. That is our fundamental principle. Our economic system has become so complicated that we have been endeavoring to escape from that fundamental, and somehow or other to clothe some Government authority with the power to take every violator by the back of the neck and rub his nose in the sand, regardless of the effect upon the innocent, and it is because the innocent have been compelled to suffer along with those who have violated it, that we find such a fear among many businessmen of what they call Government regulation.

I feel that we have got to find the way to do as you suggested a moment ago, to make men a little more like angels, but I would express that rather in this way, to say to get a better understanding among a larger proportion of business leaders of the abuses that ought to be abolished. I fear, in other words, that there is always the danger of creating more abuses by vesting discretionary power in any government than there is from permitting things to govern themselves as far as possible.

Set up your standards for the masses of the people and that is the most you can hope to do, because when all is said and done, law is the crystallization of public opinion, and you can no more enforce the antitrust law upon the business community without an understanding upon the part of the business community of what ought to be abandoned, than you could enforce prohibition among the masses of the people. Unless the people want a law enforced, it won't be enforced, no matter how large a government machinery you establish to carry it out.

Mr. FRANK. Senator, I most heartily agree with you as to that last point. I think any governmental arrangement or economic institution cannot be effective and persist unless it is founded upon the habits of the community. Those habits can be changed to some extent by law, but in the last analysis any law must have a foundation in a favorable community attitude. But, unless we proceed on the hypothesis (which none of us would be willing to accept in toto) that all

laws should be abolished, or that laws should merely be hortatory and never enforced in courts of law, we must rely upon someone to enforce them.

Now, to enact into a statute a provision that something has to be done, is not sufficient unless, there be somebody who can enforce it either as I say by way of damages, by way of injunction, or by way of penalties.

I am heartily in accord with you on this point: I don't know anyone who could feel more strongly than I that in this day of all days we need to guard against the abuse of the innocent, the terrorizing of the innocent by the threat of the use of state force against them without the preservation of their civil liberties. If anything, we should throw more safeguards about the innocent to prevent the abuse of criminal enforcing powers in the hands of prosecutors. But whether it be by criminal law, civil law, equity or common law, statute or otherwise, merely writing or having something in a law, or merely putting something in a charter, saying this shall or this shall not be done, isn't sufficient, because it won't work automatically. Somebody has got to have whatever you want to call it—discretion, judgment, or the like—as to whether or not, and when, the statute shall be enforced.

We have on the books of most States thousands of laws. All of them cannot be enforced, some of them are obsolete, some of them are inadequately drafted, some of them are just plain foolish. The enforcing officer, the prosecuting officer having to do with these criminal laws, has to make a selection. He has to determine which statutes to enforce and which of the numerous suspected violators to enforce them against. We are not accustomed to calling the power to make that selection "discretion." But we can't enforce all laws against all violators or, as you said, half the people in the United States, I should say three-fourths of the people in the United States, would be engaged in enforcing law. Whether you call it discretion or not, somebody has to make a choice.

The CHAIRMAN. Let me give you an example of what I mean. In the bill which Senator Borah and I have introduced from time to time for the establishing of Federal licensing or a Federal franchise system, it is provided among other things that no person who has himself loaned money to a corporation, or who is a director of an institution which has loaned money to a corporation, may be a director of that corporation.

Now I want to ask you as a lawyer whether you think that any lawyer would advise the director of a bank to allow himself to be elected director of a corporation which was borrowing from that bank, or whether the corporation which was borrowing it would permit the director of a bank to continue to serve as director. Would it be necessary to clothe anybody with discretion to enforce a provision of that kind?

Mr. FRANK. Senator, I can answer that best by saying that similar statutes have been on the books and have been violated, and have been allowed to go into desuetude. I think the history of corporation law shows that clients in those instances either do not go to their lawyer, or go to a foolish lawyer, or a crooked lawyer, and also that they find all kinds of devices for apparently complying so that they can save their consciences or their lawyer's conscience, or meet his high or low standard of intelligence sufficiently so that they are willing to do what you or I would consider a violation of statute.

I just can't think of any law that some people haven't violated, and unfortunately, some people who ought to know better.

The CHAIRMAN. I think possibly you might agree with me in saying that one of the causes for the condition which you described may be the fact that so many of these corporations are created by State charter but are engaged in national business, and thereby the self-enforcement is rendered almost impossible.

Mr. FRANK. I agree with you, to this extent, as you know—we might as well put it in the record—that it is high time that we had some kind of Federal incorporation or licensing law. I think that the migratory or tramp corporation ought to be ended, or if allowed to exist it ought not to be allowed to engage in interstate commerce without complying with certain minimum standards of decency as to the conduct of its directors and stockholders.

The CHAIRMAN. We are now in complete agreement.

Colonel CHANTLAND. Mr. Chairman, might I offer one observation on the point from which we started. One distinction occurs to me very quickly, Mr. Commissioner Frank, as between the ability that you have to offer declaratory judgments or to pronounce them in the utility field, and the Federal Trade Commission's field that covers all industry. The theater and character of operations in a utility which has just a service to render, and in free, independent trade of all kinds, are very, very different.

Mr. FRANK. The field is much larger.

Colonel CHANTLAND. The theater and character both.

Mr. FRANK. Exactly, and I quite agree that were the Federal Trade Commission or any other agency to be vested with power to make such advance administrative determinations as I have indicated it should have, it would of course be necessary that it have a very large personnel and appropriation.

Mr. DAVIS. Mr. Chairman, as this seems to be a pretty live subject, I wish to make this observation. If I understand the practice, the instance stated by Commissioner Frank, I do not understand that the Commission rendered any advance opinion in the sense that we generally discuss that. The Congress in the Holding Company Act defined a holding company. It laid down various standards and then delegated to the Securities Commission the authority to determine whether a given corporation was a holding company, and to take appropriate action in the event it found it as prescribed by the statute.

Now when a given corporation makes an application to you for the determination of that question, you have presented to you an actual issue under your jurisdiction. It is a matter to determine upon facts that are a matter of record. There is no difficulty in determining the corporate set-up of a given corporation, and I know that your Commission has all those facts before you, before you reach a decision.

It is purely a factual matter, you might say largely upon the record of evidence, and that is vitally different from any agency undertaking to give an advance opinion as to whether a certain state of fact will constitute a restraint of trade which involves various industries particularly concerned who wish to engage in the conduct that is submitted for approval and which affects their customers and their customers' customers and various competitors of all others, and which affects the general public. Neither their corporations nor anybody

else without a very extensive investigation both legal and economical can ascertain what those facts are and what those effects are upon the various elements of society involved, and Congress does not lay down a standard of rules for the determination of those varying industries and varying methods and various circumstances with varying effects which would be applicable to all of them, although I can well conceive where it would be done in the instance that you state, just as yesterday Senator King referred to authority given the appropriate government official to determine in advance what the tariff would be upon a given article; that is a matter of revenue; it is a matter between the importer, in other words the taxpayer, and the Government, and it affects nobody else except the taxpayer, and so that is a simple factual matter that has to be determined by that appropriate official sooner or later and which he determines. It involves a question of calculation or a question of classification under the law.

MR. FRANK. Commissioner Davis, you chose simply one of my illustrations. Let me give you one that comes closer to the kind of situation that you were discussing. In section 6 (a) of the Holding Company Act, it is provided that—

Except in accordance with a declaration effective under section 7 and with the order under such section permitting such declaration to become effective, it shall be unlawful for any registered holding company or subsidiary company thereof

I am skipping now.

to exercise any privilege or right to alter the priorities, preferences, voting power, or other rights of the holders of an outstanding security of such company.

Turning now to section 7, it provides that such a company "may file a declaration with the Commission," and that it shall have a hearing. The Commission must now allow such a declaration to become effective (that is, it must not permit the company to do something it wishes to do but cannot lawfully do without the order of the Commission) if the Commission finds "that such exercise of such privilege or right will result in an unfair or inequitable distribution of voting power among the holders of the securities of the declarant," or (now I come to the significant language that bears on your point) "is otherwise detrimental to the public interest or the interest of investors or consumers."

Now, whenever a utility holding company is engaged in the vast operations in which many such companies are engaged, a reorganization (for that is what this is—a quasi reorganization of that company) will affect, as Congress recognized, not only the persons immediately concerned but the public interest and the interest of consumers; for the financial structure may have important ramifying effects upon future rate determinations to be passed upon by State commissions. Accordingly, the Commission when passing on that question must take all those facts into account. To be sure, the Commission acts upon a record and that is what I have been saying, parrotlike, for the last 3 days, that I think the informal method of Bill's dropping into someone's office and saying "What do you think of this?" and telling it informally and then getting a letter in effect saying, "Sure, that's all right," is not the way to do it. But what this statute requires our Commission to do is to have a full hearing and to have a full investigation. Our staff works arduously digging out all the facts which appear to be pertinent to the issue. Those facts are put into

the record and then the Commission must make the determination, among other things, that neither the public interest nor the interest of consumers will be adversely affected. In addition, in the particular kind of situation I am discussing, the statute provides that "Any order permitting a declaration to become effective may contain such terms and conditions as the Commission finds necessary to assure compliance with the conditions specified in this section," including those conditions which I have quoted.

I have simply, so far, taken two instances; I suppose I could give you a dozen or more out of this statute in varying contexts where the proposed action does not constitute a case or controversy; nobody is having a dispute; somebody wants to do something. Instead of Congress saying, "You can't do this," Congress said, "You can't do this unless the Commission finds that the public interests and the interests of consumers and the interests of investors are protected;" and the Commission does find that, if at all, only after a hearing and after a full investigation.

All that I am suggesting is that there may well be circumstances (perhaps they need to be limited in scope) where the same technique could be applied to situations arising under other laws, including the antitrust laws; in other words, without a case or controversy, without a dispute arising such as a court could pass upon, prior to an order of an administrative body. For often no company could, in the first instance, go into a Federal court (except perhaps those in the District of Columbia) to procure such an advance adjudication; the ordinary Federal court, under our Constitution, could not, usually, in the first instance, make such a finding, since there wouldn't be a case or controversy. As I understand the authorities, most of such cases would not conceivably come within the terms of the Declaratory Judgment Act; and, if they did come within the terms of that act, I think the act, to that extent, would be unconstitutional.

What the Holding Company Act provides is not, "You can't do this unless certain things are true," but this: "You can't do it unless the Commission finds that certain things are true," or, in other words, "You can do it if the Commission finds that those things are true."

To be sure, the scope of activities of our Commission with respect to utility companies hasn't nearly the breadth of the antitrust laws. Maybe, for the purposes of using such a technique the antitrust laws would have to be broken down into subdivisions and certain portions segregated for such advance administrative determinations. All I am suggesting is that the technique seems to work well, that it seems to be desirable, that as the Holding Company statute provides, if the Commission makes an order and a citizen relies upon it, then he will be protected from the pains and penalties provided in the statute, even though thereafter that order be revoked, amended, or found to be void. In other words, it means that it is not an instance of telling the citizen, "You are presumed to know the law," when in many instances none of us know the law until the Supreme Court has acted. There are many statutes on which many of us have been entirely mistaken in the light of subsequent Supreme Court interpretations. And it seems to me that such a technique would be wise, if we are

interested, as the chairman has indicated, in making it possible for citizens to go about their business, to know that they are not acting at their peril, so that our industry may be advanced, so that the wheels of industry may turn and people be employed and goods produced at increasing efficiency, at lower prices to consumers, and so that our economy may function well. It seems to me unmistakably desirable that so far as possible the citizen should not fear when he is acting that some day he may be called into court and either have damages assessed against him, or even worse bear the stigma of, an indictment and a jail sentence or a fine, a criminal sentence which will be a blot on his escutcheon for the future.

Mr. DAVIS. Do you understand that an appeal lies from your action in the instance you state? In other words, suppose that you hold that a certain corporation is a holding company. Do you understand that the appeal lies and that the circuit court of appeals and the Supreme Court would have a right to review that?

Mr. FRANK. They would have the power to determine whether we had abused or exceeded our powers; that is, they would have the power to determine in a particular instance that the statute under which we were acting was unconstitutional, and they would also have the power to say that the Commission had exceeded its statutory powers. In certain instances the courts might, perhaps, not have the power both to reverse the adjudication of the Commission and to direct what the Commission's revised adjudication would be. But I have no doubt that there are many kinds of Commission action where a claim is made in court that the Commission, in acting, violated its statutory powers and where the courts would have power, either on appeal or by injunction or mandamus or otherwise, to make the Commission comply with the statute.

Mr. DAVIS. Well, if the courts have that authority, it is a controversy and a justiciable question.

Mr. FRANK. No; the controversy then arises because the Commission is said, in a law suit, to have violated its duty. It is true that some kinds of questions put up to the Commission may be of such character that, if by statute, they could first come before a court, there would be a case or controversy. But I think that the Federal courts (other than, perhaps, those in the District of Columbia) could not, in the first instance, constitutionally deal with most of the kinds of cases I have adduced, because no case or controversy would exist; and therefore, the Federal courts themselves could not, in such cases, give the kind of advance decisions which I have described. But if it were asserted, in a lawsuit against the Commission, that it, in dealing with the kind of situation I have described, had failed to comply with the statute, or had gone outside of its statutory powers, then there would be a case or controversy between the Commission on the one hand and, on the other hand, the person either wanting to do the act which the Commission attempted to prohibit or desiring not to do an act which the Commission had directed him to do.

The controversy then would arise between the litigants, who would be the citizen who felt he was aggrieved, and the Commission which either refused to do an act that the statute called upon it to do, or directed acts to be done which it had no power to direct to be done.

Mr. DAVIS. I respectfully wish to state that I think in the case you stated there is a controversy, not between citizens but between the Government, represented by the Commission, and the applicant.

Mr. FRANK. I agree with you, Judge, but—

Mr. DAVIS. And if there is not a controversy, neither the circuit court of appeals nor the Supreme Court would have any right to pass upon anything except the constitutionality of the act.

The CHAIRMAN. Now I am going to exercise my authority as chairman. This is too good an argument, and if I don't stop it I will be back in it myself, so the committee will stand in recess—

Mr. MOREHOUSE (interposing). Mr. Chairman, may I say before we close, in order to get the record straight, as this is the close, as I understand it, of part 2 on the program of the Federal Trade Commission, I would like to have it understood, with the committee's permission definitely on the record, that the Commission's files of exhibits, numbered from 1 to 205-F inclusive, and which are here physically present and which are described in the report which was already received when I testified, may be received by the committee as physical exhibits, but not—

The CHAIRMAN (interposing). But not for printing in the record. That is the understanding, Mr. Morehouse.

The Federal Trade Commission will be prepared to proceed at the next session.

The committee will stand in recess until Monday morning at 10 o'clock.

(Whereupon, at 5:05 p. m. an adjournment was taken until Monday, March 6, 1939, at 10 a. m.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

MONDAY, MARCH 6, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:20 a. m., pursuant to adjournment on Friday, March 9, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senator O'Mahoney (chairman); Representatives Reece and Williams; Messrs. Thorp, Henderson, Davis, Ferguson, O'Connell, Patterson, Berge, and Hinrichs.

Present also: Federal Trade Commissioners William A. Ayres and Charles H. March; Willis J. Ballinger, director of studies and economic adviser to the Federal Trade Commission; William T. Kelley, chief counsel; Eugene W. Burr, attorney; and Dr. G. C. Gamble, supervisor of monopoly studies, Federal Trade Commission.

The CHAIRMAN. The committee will please come to order.

Mr. Ballinger, are you ready to proceed?

Mr. BALLINGER. Yes, sir.

STATEMENT OF WILLIS J. BALLINGER, DIRECTOR OF STUDIES AND ECONOMIC ADVISER TO THE FEDERAL TRADE COMMISSION

Mr. BALLINGER. Mr. Chairman, before beginning this morning's session I have some charts and tables which I would like to offer for the record. The first set pertain to a statistical analysis of the data which the Federal Trade Commission presented in its 7 years' program of experience in enforcing the antitrust laws. Some of the tables project the work of the Federal Trade Commission back to its organization in 1915.

The first table which I offer for the record and which I will ask to be marked shows the extent to which industries have been affected in the United States by the prosecuting activities of the Federal Trade Commission.

The Bureau of the Census classifies all industries into 16 major groups. These 16 major groups in turn are classified into approximately 354 commodity divisions. Table No. 1 shows that since 1915 the cases of the Commission which involved a violation of the antitrust law successfully prosecuted dealt with practically every one of the major industry groups classified by the census with the exception of leather and its manufacture and railroad repair shops.

Taking the year 1935 as a base year, it may be said that directly or indirectly the decisions reached in these various cases have exerted at one time or another an influence on a manufacturing area of busi-

ness in the United States made up of approximately 81,000 manufacturing establishments employing over 3,177,000 wage earners and producing commodities valued at almost \$20,500,000,000.

This table further shows that of the cases successfully prosecuted by the Federal Trade Commission since 1915, 15 percent involved chemicals and allied products; 11 percent iron and steel, excluding machinery; 11 percent textiles and their products. Food and kindred products and machinery, excluding transportation equipment, each cover 9 percent; printing and publishing, 8 percent; nonferrous metals and their products and transportation equipment each include 5 percent of the cases. The remaining industry groups have less than 4 percent each of the total number of cases.

Table No. 2, which I offer for the record, is an analysis of the 54 cases involving violations of the antitrust laws in manufacturing industries which the Federal Trade Commission has successfully prosecuted in the last 7 years. This table shows that of the 16 major industry groups classified by the Bureau of the Census, practically all were affected by these cases with the exception of the products of petroleum and coal and railroad repair shops. Fifteen percent of these 54 cases involved textiles; 13 percent chemicals and allied products; 13 percent iron and steel products, excluding machinery; 7 percent food and kindred products; 8 percent rubber products; 6 percent stone, clay, and glass; 6 percent machinery, excluding transportation equipment; and 6 percent transportation equipment.

Taking 1935 as a base year, it may be said that these 54 cases exerted an influence on an area of business comprising approximately 36,780 establishments employing approximately 1,784,000 wage earners who produced approximately \$10,395,000,000 worth of commodities.

Table No. 3, which I offer for the record and ask that it be so marked, is an analysis of the 22 cases involving violations of the antitrust laws in retail and wholesale distribution successfully prosecuted by the Federal Trade Commission in the last 7 years. Twenty-three percent of these cases were directed against liquor distributors, 23 percent against food distributors. The lumber and building materials industry were defendants in 28 percent of the cases; machinery and equipment dealers in 13 percent of the cases. Five other distributing groups were involved in one case each; taking 1935 as a base year, it may be said that these 22 cases exerted a direct or indirect influence on an area of business comprising over 237,000 establishments, with net sales approximating \$7,270,000.

Table No. 4, which I offer for the record and request that it be so labeled, is an analysis of the particular kind of unfair trade practices involved in the 54 cases successfully prosecuted against manufacturing industries by the Federal Trade Commission since 1932. Sixty-nine unfair trade practices were condemned by these 54 successful prosecutions; 43 of these unfair trade practices were either combinations and conspiracies for the purpose of eliminating competition, or schemes to fix and maintain prices or techniques, the purpose of which was to restrict distribution to recognized dealers. These 3 unfair methods to restrain a free and fair competition constituted 62 percent of the 69 unfair trade practices discovered in the 54 total cases. Price discrimination was found in 17 percent of the unfair trade practices; coercion or intimidation was discovered in 3 cases.

Table No. 5, which I offer for the record and ask that it be so designated, is an analysis of the unfair trade practices found in the 22 cases involving violations of the antitrust laws in retail and wholesale distribution successfully prosecuted by the Federal Trade Commission in the last 7 years. Twenty-eight unfair trade practices were discovered in these 22 cases; 26 of these unfair trade practices involved the fixing and maintaining of prices combining to restrict production to recognized dealers, and combining to eliminate competition. Only 2 of the 28 unfair trade practices of retail and wholesale distributors involved price discrimination.

Table No. 6, which I offer for the record, and ask that it be so labeled, is a compilation of the fundamental types of unfair methods of competition encountered by the Commission since its organization in 1915. There are many variations of these fundamental techniques so that the total number of unfair methods of competition combated by the Commission in the course of its prosecuting activities is a far greater number. We offer this table to the committee because we believe it is an excellent summary of the numerous and sundry basic ways through the use of which businessmen have attempted to get around the antitrust laws of the Federal Government.

The CHAIRMAN. These exhibits may be accepted and printed in the record as requested.

(The tables referred to were marked "Exhibits Nos. 329 to 334," respectively, and are included in the appendix on pp. 2179-2182.)

Mr. BALLINGER. Senator O'Mahoney, the Federal Trade Commission has now completed parts 1 and 2 of its program. The third part is a presentation of monopoly and monopolistic practices found in certain selected industries. The Commission regards this part of its program as particularly important because in these industry studies the Temporary National Economic Committee will be shown current conditions in a number of important industries.

Before beginning this part of our program I wish to offer two charts and one table for the record. This chart is a list of the industries which the Federal Trade Commission proposes to analyze before this committee. We may not be able to get all of these industries in on our present program, but we will endeavor to get as many of them in as time permits.

(The chart referred to was marked "Exhibit No. 335" and is included in the appendix facing p. 2184.)

Mr. BALLINGER. The second chart, which will be here in a minute, which I offer for the record and request that it be marked, is a chart showing the 50 largest manufacturing industries in the United States according to the Biennial Census of Manufacturers for 1935. This chart shows how many of the 50 largest manufacturing industries in the United States have been successfully prosecuted by the Federal Trade Commission for violating the antitrust laws since the organization of the Commission in 1915. It shows that 56 percent of the largest manufacturing industries in the United States, producing approximately 63 percent of the total value of products of these 50 industries, have been guilty of restraining trade in one way or another in the last quarter century.

(The chart referred to was marked "Exhibit No. 336" and is included in the appendix on p. 2185.)

Mr. BALLINGER. From this chart it is seen that at least five of the industries selected by the Federal Trade Commission for presentation to the Temporary National Economic Committee are among the largest manufacturing industries in the United States. Thus steel is the third largest manufacturing industry, tobacco eleventh, rubber tires twenty-third, liquor twenty-fifth, farm machinery thirty-eighth.

The fluid milk industry, which is a nonprocessing and nonmanufacturing industry, is a very large industry but could not be included on this chart because of the fact that it is not a manufacturing industry.

The table which I am now offering for the record contains some basic information about the industry as we are presenting it, as far as this information could be obtained.

(The table referred to was market "Exhibit No. 337" and is included in the appendix on p. 2185.)

Mr. BALLINGER. The number of factories in each industry, the number of employees in each industry, the total salaries and wages paid in each industry, and the wholesale value of the product, are shown.

This information was obtained from sources which gave the best obtainable estimates for the year 1937. The estimate on sulfur was unobtainable, though the Commission knows that there are only five sulfur producers in the United States, the two largest of which produce an overwhelmingly preponderant amount of all the sulfur produced in the United States.

Now we are ready to proceed with the steel industry as our first industry study. Before an industry has been presented I have been directed by the Federal Trade Commission to explain to the Temporary National Economic Committee just why this industry was selected for presentation. We have hundreds of industries in the United States and the files of the Federal Trade Commission offered an unusual amount of material from which selection could have been made. Out of this wealth of material we selected the steel industry as well as other industries for certain very definite reasons. So far as the steel industry is concerned, Senator, I think one reason would entirely suffice. The Federal Trade Commission was directed by the Temporary National Economic Committee to report specifically on the steel industry, and so I don't think that any other reason is necessary. So I will call as the first witness for the Federal Trade Commission, Mr. Burr.

TESTIMONY OF EUGENE W. BURR, ATTORNEY, FEDERAL TRADE COMMISSION, WASHINGTON, D. C.

Mr. BALLINGER. Will you state your name for the record?

Mr. BURR. Eugene W. Burr.

Mr. BALLINGER. What is your position in the Federal Trade Commission?

Mr. BURR. I am a member of the trial staff—attorney.

Mr. BALLINGER. How long have you been with the Federal Trade Commission?

Mr. BURR. Since November 1920.

Mr. BALLINGER. Any further questions?

The CHAIRMAN. No; but may I interrupt at this point to say that the leaders of the Senate last week began a concentrated drive to persuade the various legislative committees of the Senate to speed up their work so that bills pending before the various committees may be transferred to the Senate calendar. That accounts for the absence this morning of Senator King, Senator Borah, and probably a similar reason accounts for the absence of Vice Chairman Sumners and Congressman Williams.

I have before me five notices of other committee meetings this morning at 10:30, committees of which I am a member, so I am going to have to beg to be excused for at least a portion of this morning's hearing. I regret very much, Mr. Burr, that I am not going to be here to follow the opening of your presentation, but I hope to be on hand before it is concluded, and I assure you that I am going to read it with a great deal of interest.

Mr. BURR. You are very kind indeed, sir.

(Representative Reece took the Chair.)

Acting Chairman REECE. You may proceed, Mr. Burr.

Mr. BURR. Mr. Chairman and members of the committee, the subject that I have to present is really threefold; at least consider it as divisible into three parts. The first is the basing-point system as practiced in the steel industry. The second is the extent so far as we know of the delivered price system considered in a generic sense in industry at large in this country; in other words, the steel industry in practicing the basing-point system is to be considered to a large extent as representative of similar practices in other industries which use either the basing-point system or what is known as the freight equalization system. The third topic is the effect of these systems upon the public interest.

Mr. PATTERSON. Before Mr. Burr gets into his subject, phase 1, would you kindly define for the layman the basing-point system? What does that mean?

THE BASING-POINT SYSTEM AS PRACTICED IN STEEL INDUSTRY

Mr. BURR. I might as well come to the definition now as any time, I take it. A basing-point system is one under which there are certain points of production and sometimes certain points that are not points of production, as is true in steel, that are selected as basing points. Each producer charges at any given point of destination, any location of the customer, a price which is made up of the basing-point price plus the freight from that point to customer's location, and defrays the actual cost of delivery itself. If the customer is located at the basing point and buys from the basing-point plant, then the actual and the charged freight are the same. The first thing to determine when you make up the price is this: What basing point governs the destination in question? And the way to determine what basing point governs the destination in question is this: That basing point governs which has the lowest sum total of the base price there plus the freight to destination. Is that clear?

Mr. PATTERSON. Would you give an example? Take Pittsburgh and some one or two other points and give names and examples, if

you can, to bring it out a little more clearly. I have before me what I understand is a layman's definition of the basing-point system, but even that could be cleared up.

Mr. BURR. Well, suppose your destination is Miami, Fla., and suppose that they want some sheet piling in Miami and the Government is a buyer of sheet piling at Miami and asks for bids. Now suppose that they ask for bids from the Jones & Laughlin Steel Co. at Pittsburgh and the Carnegie at Pittsburgh and the Kalman Steel Co., which is a subsidiary of Bethlehem at Buffalo, and suppose they ask for bids from Inland at Chicago, those four being the only ones in the country that make sheet piling, and they want it delivered at Miami. Now, then, that basing point will govern which has the lowest freight rate from those three points to destination, plus the base price at each of those points of production. In other words, Inland's freight from Chicago to Miami will be so much, put that there, plus Inland's base price; then put in a separate item, a separate computation, the price of Carnegie at Pittsburgh, plus the freight from Pittsburgh to Miami; do the same thing for the Kalman Steel Co. at Bethlehem, and whichever one is lowest to Miami, including freight and base price, that will be the governing basing point. Then all four of those concerns will charge that base price plus that freight as its price at Miami, making an identical price to Miami for all four of them, two at Pittsburgh, one at Buffalo, one at Chicago, each of them outside of the governing basing point will absorb the actual freight. That is an actual experience. Is that clear now?

Mr. PATTERSON. Thank you.

Mr. HINRICHS. Mr. Burr, you are talking about an identical price in Miami. As I understand it, you are using the basing price as an illustration of a monopolistic practice. Isn't it equally true that a competitive price presumably would be identical in Miami, if they were being offered on strictly competitive bids?

Mr. BURR. I wouldn't think so; no, sir.

Mr. HINRICHS. Can you cite any instance?

Mr. BURR. Under a competitive set-up nobody would know what the other fellow was going to charge.

Mr. HINRICHS. Can you cite any instance of a competitive price in which effective sales are not made at a relatively uniform price in a single market?

Mr. BURR. That is pretty hard to do because there is so much of this same kind of thing in industry in general.

Mr. HINRICHS. It is also rather hard to do, isn't it, because it is a complete violation of all orthodox economic theory which presupposes that there is a single price and a single market. The thing that you are complaining of is not that there is a single effective selling price in Miami but rather that there is a single bid price in Miami which can be computed from your series of identical prices. It is not selling price, the price at which goods move, in which you complain of identity, is it?

Mr. BALLINGER. Mr. Hinrichs, may I say that a demonstration that a basing-point system is a monopolistic device will be given by another witness, complete with charts, and so forth, so that if possible questions should be reserved for that witness and it probably will facilitate the hearing.

Mr. BURR. I think I'd rather attempt an answer, if I may.

The difference between the competitive set-up, the difference between the basing-point system and the competitive set-up is this: Each one of the persons who sells on a really competitive market knows what he is willing to sell at, and if he comes on the market, we will say, in Chicago, the grain market, there is an active market on which a man, if he wants, will drop his price immediately. The others can or need not, as the case may be, follow.

When you come to the basing-point situation, you have got something that is entirely different. You have got a situation where everybody who is selling steel knows what the formula is, and is prepared to make an identical delivered price based upon the formula. You haven't got an open market there, sir, at all. There isn't any such thing as an open market in these basing-point systems. There is a formula price, and they are under an understanding, they are under a meeting of the minds whereby anything that is sold in a given area that is governed by given basing points is sold at the formula price. It is the complete antithesis, though it seems perhaps superficially to resemble a market situation, from a market situation, because the man who sells, we will say, from the Buffalo point or the man that sells from the Chicago point of production follows the Pittsburgh base price and he follows the rate of freight from Pittsburgh to destination and absorbs the excess freight charge that he has to pay actually to get it there, and that price is fixed for him. It isn't an open price in the slightest. There is nothing "market" about it. It is a formula price which is known in advance, and if the Kalman Steel Co. or Inland were to cut that price they would be in the category of a price cutter.

Acting Chairman REECE. Will you permit an interruption?

I think it might be helpful to the committee, Mr. Ballinger, if you could give the committee the names of the witnesses which you expect to call in steel and the topics to be covered.

Mr. BALLINGER. I think Mr. Burr is going to cover the history of the basing-point system in the steel industry and the encounters the steel industry has had with the Federal Trade Commission, and tomorrow Dr. Fetter will attempt a demonstration that the basing-point system is a simon pure monopolistic device. Then Mr. Burr will discuss some of the reasons why, under existing law, it is so difficult to get at the basing-point system and get it out of an industry. That, in general, is the program we are pursuing.

Mr. BURR. The situation is just this: Wherever you have a system which determines in advance on the part of whatever concern is fixing the base price, you have a set price at every destination within that basing-point territory. Within basing-point territory, governed by the Chicago, for example, the Pittsburgh sellers sell on that Chicago base plus the freight from Chicago to destination, and absorb the freight from Pittsburgh to destination. In other words, the formula makes the price, and everybody knows what it is going to be and there isn't any more market to it. It is the complete abrogation of the market theory with respect to trading in goods.

Gentlemen, if you will permit me—I don't object to these questions except to this extent. If you will permit me to outline the facts, I think we will get along a little faster. I don't object to the

questions, but just let me get over these facts, if I can, and I believe that some of these things will iron themselves out.

Acting Chairman REECE. Is that agreeable to the committee, to proceed on that basis?

Mr. BURR. I don't want to bar out questions at all.

Mr. DAVIS. Mr. Burr, just one suggestion. I think it should be made clear to the members of the committee that when reference is made to freight, you mean rail freight.

Mr. BURR. Rail freight as a rule. The formula is the all-rail freight formula, but there are certain places where there is part rail and part water, and some that is all water.

The Federal Trade Commission has conducted some investigations into the steel business, and for the purposes of the committee may I offer, not for the record, not to be printed at all, certain documents that relate to the steel industry and the Commission's work upon steel.

Acting Chairman REECE. They will be accepted.

Mr. BURR. The Commission made a report to the Senate entitled Practices of the Steel Industry Under the Code. That with the covering letter was printed as document 1259 of the Seventy-third Congress, second session. I would like to offer that.

Also report of the Federal Trade Commission to the President, with respect to basing-point system in the iron and steel industry, of November 1934. That was prepared in response to an Executive order issued by the President May 30, 1934. I would like to offer that.

The third is a Report on Steel Sheet Piling, addressed to the President by the Commission on June 10, 1936, and that also was in response to a direction from the White House.

Now I don't expect to refer very much to the N. R. A. Code, but I think it perhaps might not be out of order, if the chairman is agreeable, to have the Code of Fair Competition for the Iron and Steel Industry as approved on August 19, 1933, by President Roosevelt, and also the amended code as approved May 30 the following year—if you care to receive those.

Acting Chairman REECE. The committee will be glad to receive them.

Mr. BURR. Now, the next thing is the Findings as to the Facts and Conclusion, and the Order to cease and desist in the *Pittsburgh Plus* case, issued by the Commission July 1924. Will you receive that?

Acting Chairman REECE. Without objection.

Mr. BURR. Now finally there were taken rather extensive hearings—oh, comparatively extensive—comprising about 700 pages on the basing-point bill offered by Senator Wheeler. It was S. 4055 in the Seventy-fourth Congress, second session. Now that contained the examination by the committee of some 17 witnesses of the steel industry, if I remember correctly, and contains matter to which I shall refer today. I think you should probably have it on file. I think it is out of print.

Acting Chairman REECE. The committee will be glad to receive it.

(The documents referred to were marked "Exhibits Nos. 338 to 344," respectively, and are on file with the Committee.

Mr. BURR. Now one of the news organizations printed the statement recently to the effect that the Commission's presentation today would be based upon the investigation which has been made under the T. N. E. C. inquiry. That is not quite true. That investigation has not proceeded far enough, and in fact it is not related to the fundamentals of this system so as to make it at all necessary to have those data, which are now being collected, in hand for the present purpose. The investigation does not go to the character of the system as a means for curtailing price competition.

It will show some of the effects up to date, and will also show the extent of cross hauling up to date, but it does not go to the fundamentals of this situation, and furthermore the Commission is of the opinion, as I understand it, that this committee ought to have on hand, ought to have in mind, the importance and general effects of this system so that they will be able to be turning the thing over in mind and not have it come, when the investigation is complete, de novo, as a new problem. It is important, I believe, that the committee should understand the scope and the tremendous public reaction of this general system, and at a later time we will put in a final report which will bring up to date the system and show the results of the investigation being conducted, provided the life of the committee is extended, as I think it will be.

Mr. BALLINGER. Mr. Burr, I believe you said the T. N. E. C. was conducting an inquiry into the steel industry. I do not believe that is correct, is it? The inquiry is being directed by the Department of Justice, and the Federal Trade Commission cooperating. Is that not correct?

Mr. BURR. That is probably correct.

Mr. BALLINGER. And we are discussing today and in our hearings before this body one phase of the steel industry, leaving other phases to be discussed by the Department of Justice.

Mr. BURR. That is true, Mr. Ballinger; that is entirely true. The Commission does not want to say it has no responsibility at all with regard to the investigation being conducted by the Department of Justice because we united with them and their letter, with our authority, said it was a joint request that they were making on behalf of both branches of the service, but they are doing the actual work.

Mr. BALLINGER. May I make one more comment, Mr. Burr? Will you explain to this committee that in bringing up this phase of the steel industry we are not basing our case upon any information requested from the steel industry in that joint questionnaire which was sent out under the auspices of the Department of Justice, and the Federal Trade Commission? The story seems to be current in the press that we are prejudging the case without waiting for the information.

Mr. BURR. Before I go further I think it should be said that there were certain changes in the system which were made in June 1938. Those changes, or rather the effect of them—we know what the changes were—the effect of those changes will appear in the final report with respect to the basing-point system in steel. I would say at this time, so as to get it out of the way, that the

changes which were made in June last are important. But they do not go to the fundamentals of the situation with respect to the effect upon price competition in the steel industry.

At that time additional basing points were created which had not been basing points for the specific products in question up to that time.

Furthermore, the price at Pittsburgh was reduced and the price elsewhere was reduced still more. The prices at the main producing points for the main products were in most instances leveled off even with the prices at Pittsburgh so that the price at Chicago on most of the principal steel products, the price at Buffalo, the price at Bethlehem, and the price at Birmingham, Gary, and other points, are now for most products equal to those at Pittsburgh. Previously, these base prices had been higher than those at Pittsburgh.

This, therefore, has had an advantageous effect with respect to the sectional character of the discrimination which existed prior to that time in some sections of the country. So far as the system, however, is subject to criticism on the ground of its elimination of price competition, the changes made last June do not have any effect.

Now, at this point I was intending to define the basing-point system and the formula. I would like to ask members of the committee if that has been sufficiently defined. If not, let us go through it again.

Mr. BERGE. There was one question. I think I did not quite understand how the freight charges are added from the various points to the destination in determining the total charge, but I do not understand whether the base prices at the different points, Pittsburgh, Chicago, Buffalo, and so forth, are the same or different, and if they are different, what elements go into fixing them. That is, are they fixed by agreement or are those prices based on the individual costs at the different points?

Mr. BURR. I am going into that right now. That is a very good question. I may give a little bit before I introduce the answer to that, if I may. Thank you, sir. The general outline, the basic facts of the basing-point system in steel is thoroughly admitted. It cannot be denied, and it has not been denied by the industry. William A. Irvin, president of the United States Steel Corporation, testifying before the Wheeler committee, to which I have referred, in hearings that are now before you, was asked this question—I read from page 583: ¹

Now the testimony of practically all witnesses so far who have testified here as to how they arrived at their sale prices has been to the effect that they figured out the lowest combination of base price and freight rate to a given destination in order to determine what price they would have to meet in that market. Is that your view of it?

Mr. IRVIN. That is generally correct.

Now, Mr. Walter S. Tower, executive secretary of the American Iron and Steel Institute, defined the system as one where, now quoting again—

The seller quotes a delivered price to the buyer. The delivered price is composed of the price at the basing point, which may or may not be the location of the seller's plant, plus freight charges from the basing point to the point of delivery. * * * In quoting prices for his products the seller uses the basing point which will give the prospective customer the lowest delivered price.

¹ "Exhibit No. 344", on file with the Committee.

That is page 273 of the record.

Now, Mr. Irvin, testifying again, said:

Under ordinary circumstances the price at any given destination for any steel producer is the price at the basing point that covers the customer's location, plus the freight rate from the basing point to the customer * * * except where we have basing points on the Gulf coast or in the Pacific coast.

Page 610. And also quoting again:

Each producer of steel, when he follows the basing-point system, makes that price at any given destination.

Now, also saying—

When prices other than those are made it makes a departure from the multiple basing-point system.

Page 610-11. Now, do you get the import of that testimony? It means that in any destination in the United States, unless a man is walking out on the system, he is making the same destination price precisely that every other man who is producing that same thing in the United States is making at that destination. And that is known in advance; that does not change from hour to hour, like the open market of grain at Chicago or other exchanges; that is not a market.

To answer the question a moment ago again, perhaps, or attempt to anyway, that means that the buyer, if he knows what the governing basing point is and the freight rate, can tell in advance just what the bid is going to be and he will know in advance what the bid is going to be from everybody, no difference who it is, unless some producer violates the system. Then the adherence to the all-rail freight factor of the formula is important. Mr. Irvin again testifying said—

Now in calculating the freight rate from the basing point to the destination—

Mr. FERGUSON. Mr. Burr, you have overlooked answering Mr. Berge's question.

Mr. BERGE. Well, I intended a moment ago to inquire just how the base price at these various cities is determined.

Mr. BURR. I am still coming to it, and—well, I will turn to it right now, right here, I will give it to you right here. Mr. Irvin testified upon that very question—president of the United States Steel Corporation—on page 595:

I would say we generally make the prices.

The CHAIRMAN. You generally make the prices?

Mr. IRVIN. Yes, sir; we generally make the prices, unless some of the other members of the industry think that that price may be too high and they make the price.

The CHAIRMAN. You lead off, then, with a price charged, either up or down, at Gary, is that correct?

Mr. IRVIN. Yes, sir.

He also testified again:

We always notify the trade papers * * * and others interested as to what our prices are.

The CHAIRMAN. Then the rest of them follow that?

Mr. IRVIN. I think they do. That is, I say they generally do.

They may quote the same price, but maybe they need some business and make a better price. We do not always know that until it is over.

Then he testified—that is, page 595—later that those who do not follow the corporation's price "are looked upon as price cutters in the

industry," and Mr. Irvin added, "We have them with us always." The amount of price cutting "is dependent upon business conditions," it was testified; and Mr. Irvin said:

When we are going at 30 or 40 percent (that is, of capacity) we have more of them (that is, price cutters) with us than when we are going at 60 or 70 percent.

After the corporation has issued its base prices—

if anyone in the industry decides to have a price other than the one we may have and publishes that price to his trade, of which we have become acquainted immediately through our connections with the trade, having 2,700 salesmen, then we immediately change our price to meet his lower level. (Page 612.)

This testimony confirms the findings of the Commission in the *Pittsburgh Plus* case to the effect that the United States Steel Corporation's prices "are generally followed by their competitors." That is volume 8 of the F. T. C. Decisions, at page 32, paragraph 12-i.

Mr. Irvin further testified that such a producer is not considered a chiseler—

if he comes out and makes a price lower than ours. It is only when a price is made which is lower than the price he has made to the trade. (Ibid.)

In other words, if he makes a lower base price then that ipso facto is taken by the Corporation and becomes a part of the basing-point formula, and then all delivered prices are identical again and the fellow hasn't gained anything by cutting his price except a headache.

Mr. BERGE. Then as I understand you, the base price is fixed by the process commonly called price leadership, and the United States Steel Corporation is the price leader.

Mr. BURR. It is worse than that, sir. It can't be resolved down to a case of price leadership. It is a case of price leadership in the initiation of one element in a formula delivered price. Now, when those base prices are fixed, then the formula operates automatically unless some fellow wants to get in and either chisel on the price, adopting for the moment Mr. Irvin's definition, or if he wants to cut the price, after which the leadership immediately operates to make that price the Corporation's price, and then that price becomes the basing price and you start on another cycle of formula prices. Is that clear, sir?

Mr. BERGE. I think it is. How about a situation where there may be a small plant, a small company operating in a locality where there are no competitors, geographically, nearby?

Mr. BURR. And where it is not a basing-point?

Mr. BERGE. What determines the base price there? The price leader, the big fellow, has no plant in that community.

Mr. BURR. Well, that depends upon where the small man's plant is located. If he has a basing-point there at his mill location, which he probably won't have, but he may, then the prices he makes in the area governed by that basing-point are the base price there plus the freight to any given destination within that basing-point area.

Now if he sells in some other basing-point area, then he uses the other basing-point base price plus the freight from that other basing point to that destination, whatever basing-point governs. It is the same whether the man is big or small. It all depends on whether he has a base at that point and whether he is selling in his own governing basing-point area or elsewhere. But if he has a basing-point

there at his own place of production, all of the rest of them following the system honor that base price for his particular area. He has no business to go out and slash the price under this system. He won't get any more business by doing so, and it is very seldom that they do slash the price.

Mr. HINRICHS. What do you mean by saying that he won't get any more business?

Mr. BURR. I mean he won't get any more business—thank you very much; the words “he won't get any more business” don't mean he won't get any more business at all. I mean he won't get any more business than he would have got if he hadn't slashed the price.

Mr. HINRICHS. You don't think there is any relationship between the prices at which goods sell and the quantity that is sold?

Mr. BURR. Of course, but the other people all adopt his price, as testified by Mr. Irvin.

Mr. HINRICHS. I shall be glad to reserve my questions until tomorrow if that is the most convenient way of handling it.

Mr. BURR. No, indeed; let's take them now.

Mr. HINRICHS. Let's take the case of cotton print cloth, something ordinarily regarded as a competitive product. If the price of cotton print cloth changes in the New York market, I have always understood that mills had to meet that change in print-cloth prices. That is your understanding, too, isn't it? If I have a heavy inventory of 80-80's on hand and want to get rid of some of that, I normally do it by shading the price in the New York market and getting an immediate order. As soon as that order has been placed that becomes, in general, the price at which goods move in the New York market. Wouldn't that be correct?

Mr. BURR. I don't know anything about that particular industry. I haven't been in it, and I haven't studied that industry, but I would say this, that if one man wants to move particular goods on an open market now—postulate an open market for the purposes of this answer—if a man wants to move certain goods, he can offer a reduced price on that market.

Now, I think it is quite possible that on an open market men will say, “We don't care to sell at that price. That won't last long. He will sell all he wants; we will reserve; we will hold out and not follow it.” On the other hand, so long as that offer persists on the open market, the chances are that other people who are maintaining a higher price will not get many sales, won't get many sales at their price. But if you are considering an industry like steel, where the minute a lower base price is made that becomes the base price factor in the formula, then everybody will sell at the new base price thus created for sales in that area and your competitive feature does not persist.

There is a very great and overwhelming—excuse me just a minute—difference between a controlled market under the basing-point system and a market which is of an open character where the buyers and the sellers meet together and are in constant stress of how much will you pay and how much will you sell at.

Mr. HENDERSON. Just for purposes of illumination, Mr. Burr, do you not mean that because of the fact that a price cut will be met instantly and thus become the price factor in the formula, there is a

decided repression of price cutting and, therefore, the opportunities for a lowered price to move a larger volume of goods as would obtain in a competitive market are not present?

Mr. BURR. I think that is true.

Mr. HENDERSON. I think, Mr. Chairman, that is what Mr. Burr—

Mr. BURR (interposing). If I catch the import of the question.

Mr. DAVIS. Mr. Burr, right in connection with what Secretary Henderson asked, I will ask if your observation of the operations of industry have not indicated that quite frequently if one member of the industry fails to comply with the system and submits a bid lower than the formula price, for some reason or other he very frequently withdraws that bid when the bids are opened and that fact becomes known?

Mr. BURR. Yes, sir; that is true, and documents you gentlemen have received in evidence are replete with instances of that kind. I can't go into details here, gentlemen, but there is a world of that material.

Now, just a few moments on the adherence to the all-rail freight factor of the delivered price formula in the steel industry. Mr. Irvin was asked: "In calculating the freight rates from the basing point, to the destination, you use the all-rail freight cost, do you not?" Mr. Irvin: "That is generally so with some exceptions. "It"—that is, the exceptions—"is where we have arbitrary basing points such as Mobile, New Orleans, and Galveston and other places on the Gulf in order to meet foreign competition. We also have arbitrary basing points on the Pacific coast and I think we have an arbitrary basing point at Savannah on the east coast." ("Exhibit No. 344," introduced supra, p. 1864.)

Now, on the question asked me a moment ago as to how these base prices are made, Mr. Irvin admitted that the representatives of his companies participated in meetings with other steel companies when they "talk of market conditions, what the possibilities are and prices in various localities; foreign competition, how much is coming in at this port or at that port, and at what price it is coming in; at what price foreign materials are being sold at the various seaports, and anything that would naturally arise in connection with the steel industry and other industries as well." In other words, the meetings of the industry touch on price matters, but the overwhelming influence remains apparently in the United States Steel Corporation because the same witness testified:

The various presidents and sales managers in the corporations of subsidiary companies * * * get together with us in New York and we go over the whole situation and decide upon what price we should fix (p. 611).

When you remember that by and large the rest of the companies follow the United States Steel Corporation and have apparently been doing it since before the *Pittsburgh Plus* case was decided, and also when you remember the Gary dinners when the Corporation took the lead on prices, which the Circuit Court of Appeals in the Third Circuit held had been unlawful; when you remember that set-up, it looks like a very closely controlled price system. And, furthermore, it should be added as a safeguard that I don't say there aren't times when price competition, genuine price competition breaks out in the steel industry. There are. There is plenty of it on record. In the *Pittsburgh Plus* case it was so found. But by and large in most times members of the industry find it advantageous to follow the

prices made by the Corporation and with the formula system working you can tell to a gnat's hair what the price is going to be—you can tell in advance I mean.

The head of the Bethlehem Steel Corporation, Mr. Eugene D. Grace, testified that the corporation—that is, the United States Steel Corporation—underbid Bethlehem's base prices, and Mr. Irvin, testifying later, said that he thought that statement had been made "in a rather facetious way," and he went on to say: "If I thought he intended it, I would have resented it very much." This is illustrative of what was said by the United States Supreme Court in the *Hardwood Lumber case* about the plan which was there declared to be unlawful. It was said that the plan and those back of it relied "not upon fines and forfeitures as in earlier days, but upon what experience has shown to be the more potent and dependable restraints of business honor and social penalties." That is from the *American Column & Lumber Co. case*, 257 U. S. at page 411.

This system, gentlemen, is one of reciprocity. The aim is to put prices high enough so that all producers can ship over wide areas, if not throughout the country, but each under ordinary circumstances refrains from reductions in his own home territory and permits others to sell in that territory.

Now, under ordinary circumstances, you would expect a man who has a local advantage in the territory adjacent to his own mill to hold that territory, which is high net return area to himself, against all comers. You would expect him to make a price, provided his costs were in line with those of others, such that it would be undesirable for others to enter his territory and sell there. This system is one under which they definitely look forward to shipping all over the United States, each of them.

In testifying before the Darrow committee, Mr. Tower, the executive secretary of the Institute, used as an illustration the man who wants to buy steel in Atlanta, and he said that he had the inestimable privilege of buying either from eastern Pennsylvania or from Chicago or from Birmingham, his nearby point of production, or from Pittsburgh, but it was all the same price delivered.

You would expect under a competitive system that Birmingham would have its price and would ship naturally to such points as Memphis and Chattanooga and New Orleans and Atlanta, and not invite a man from Buffalo or a man from Chicago or Gary to come down there and sell in Atlanta. You would think that the Birmingham price would hold the Birmingham territory including Atlanta; but no, they don't have any price; there is no set price; there is a set base price, but there is no set price because the real price, the net return upon which they calculate whether they are going to make a profit or not, is different from the base price. If a producer sells outside of his basing-point territory, he is absorbing probably more freight than he gets back in the delivered price, you see. A man shipping from Chicago or Gary or Pittsburgh down to Atlanta can collect as part of the formula price only the rate of freight from Birmingham over, and he has to defray the actual freight which will be more. Now, then, the actual price at those points is to be computed as different, depending upon how much freight price factor he adds and how much actual freight he must defray.

Now the net return is what they are considering in each case as to whether or not they will figure on the job, and, if that net return is different, then you can see that they are making more or less profit or loss, depending on how much freight they must absorb.

Taking that Atlanta illustration again, if Birmingham was actually competing, they would make a price for their own territory such that it would not be attractive to the other steel producers. Instead of that it is a case of the buyer having an opportunity to buy from any one of those points but all at the same price, and that price, delivered price, I would say, is high enough so that they can all afford to compete in each other's home territory.

It is the base-price factor in the formula which is put up high enough, and designedly so, so that they can ship all over the country, and the consumer ultimately has got to pay the excess for that privilege that the producers have of sending their goods throughout the country.

Are there any questions with regard to that phase of it?

Mr. HINRICHS. Just as a matter of record I am reserving questions.

Mr. BURR. The basing-point system is one which does not require to be supported at least in its bare outline by a meeting of the minds with respect to each particular job. It doesn't have to be the outcome (I mean the individual price doesn't have to be the outcome) of the calling up of one steel company over the telephone or telegraphing what they are going to ask the Government to pay for a job, we will say, at Miami. They don't have to do that. The formula is automatic. If they are following the formula, and if they know what the base price is, and if they know what tariff they receive from the Institute on that destination, that is all they need, they know precisely what the price is going to be and they don't need to get in touch with one another with respect to each individual job of the Government or anybody else.

Now there have been times when they have gotten in touch with each other, as Judge Davis suggested, when somebody makes a mistake on the bid, or something or other; then they do that very thing.

In order that the committee may gain an insight into how this situation works out, I want to further illustrate with the basing-point results that the Government experienced in connection with the steel piling bids upon which the Commission was asked by the President to report, and the report upon which is now received in evidence.

The situation was this: The Government was in need of this piling in connection with public jobs at Morehead City, N. C., at Miami, Fla., and for the big Triborough Bridge in New York City, and there are only four people who make this in the entire steel industry, the names I mentioned before. Accordingly, the Government got only those four American bids on the jobs and those bids were alike for each one of those three jobs, delivered at those three destinations. It is necessary, I believe, for this committee to get a real insight into how this thing works out; you will never know anything about it until you see just how the thing actually develops to the prejudice of the Government, State buyers, and private buyers.

Not only was the base-price part of the formula identical as used by these four concerns, the price per hundred pounds for the unwelded piling and for the unwelded piling in pairs, but it was the same for piling corners, it was the same exactly for piling T's, it was

the same for fabrication, the same for the extra in welding in pairs, the same identically for copper content, the same for all-rail freight factor from Pittsburgh to Morehead City, although they offered to ship from Chicago and they offered to ship from Buffalo; the same actual identical delivered unit price with all of the extras. This was also true with regard to a great variety of extras on Miami and the Triborough.

Mr. DAVIS. Mr. Burr, those were all sealed bids, weren't they?

Mr. BURR. Yes; those were all sealed bids. The Government requires sealed bids, I take it, for all these jobs.

The monetary consideration to be secured was not the controlling factor with respect to those bids by any manner of means. They weren't thinking about whether or not they were going to get the job when they bid; no. They all bid identical and for those different jobs they got differing net realization figures at f. o. b. their plant, which is the only thing which is going to tell in the long run whether you make a profit or a loss.

The Inland on these three jobs for the same products, the same general type of products, differed this way.

Mr. FERGUSON. They were all bidding under the same specifications?

Mr. BURR. Yes, they were all bidding under the same specifications for each respective job. Disregarding special-price factors, the basic commodity, steel-sheet piling, was the same for each of the three jobs.

The steel companies, not located at the governing basing-point, so bid as to obtain substantially different net realized prices at the different destinations on the same commodity.

The Inland Company bid on the steel-sheet piling so as to realize for the Triborough Bridge, \$40.20; for the Morehead City job, \$42.80; and at Miami, \$38.70. Similarly, the Bethlehem Steel Corporation so bid as to realize \$43.40 on the Triborough job, \$40.60 at the Morehead City, and \$43 at Miami.

This means that these two companies were willing to accept on one job less net realization than they would have realized on the other jobs if awarded them. It seems probable that if price competition had existed, delivered prices could well have been low enough to provide the minimum net realization which each was willing to receive on the job.

Be this as it may, it seems an irresistible conclusion that true price competition would not have resulted in identical delivered prices and substantially diverse net realization prices. This is but illustrative. Most bidding on Government and private jobs discloses identical delivered prices and diverse price realizations.

This business of selling nearly or all over the country brings about a differing net return according to the destination, and as a corollary to that it means that presumably they could have afforded to have taken a less price in their own home territory had there been competition, and thus kept out competitors from a distance.

This system has been supported by a great variety of different subsidiary methods, subordinate methods, of securing identical delivered prices, and for securing freedom from competition in price among the producers.

Mr. O'CONNELL. I would like to ask you a question about the identical business that you just spoke of on the Government jobs. You said there were four domestic producers or manufacturers on steel-sheet piling, and I take it they were the only bidders on these jobs.

Mr. BURR. No; there was a German subsidiary.

Mr. O'CONNELL. Is there foreign competition in this?

Mr. BURR. This German subsidiary bid on two of those jobs and bid very much less than domestic producers, but I believe there is a provision in another statute, I believe the Walsh-Healy Act, that puts a handicap on the foreign subsidiary or foreign companies, something like 15 or 16 percent.

Mr. O'CONNELL. I believe it is 25 percent.

Mr. BURR. They didn't quite go low enough to take it; they bid very much lower than the four American producers.

Mr. O'CONNELL. I think it is true that on Government work there is a differential. I think 25 percent, in favor of the domestic producer.

Mr. BURR. Yes, sir. The subordinate methods are some of them extremely important. The extras are all identical and have been identical for many years. They have a book of extras about an inch or so thick which goes into the greatest detail with respect to the extras that are to be charged for the chemical formulas and for quality and for special sizes and for a great mass of different specifications that can be included, and those extras are followed throughout by the industry. There may be some competition sneak into it, but not very much, apparently.

The extras in some types of product are a more important factor in the total price than the base price. Sometimes the extras mean more than the regular steel of the same tonnage and the same general type, and the tendency down through the years has been distinctly to boost prices on extras. I don't know whether recent changes since last June have been made on extras, but occasionally a reduction in the base price is partly at least compensated for by a boosting of the extras which doesn't appear in the trade journals. Thus prices seem to have been reduced and they haven't been reduced, sometimes, as much as they appear to have been because extras will bring in the revenue to a somewhat compensating extent.

Means for securing identical destination prices and for preventing price competition from leaking into the trade, are many. They have a traffic committee. The traffic committee informs the industry of all changes that are made in freight rates for steel commodities. The industry gets from the Institute through its traffic committee the freight rate factor that is to be charged, and if a new freight rate is brought in there may be a lag (there is always, I take it, a lag) before the information is handed out by the Institute to the industry after the change has been made. The freight rate factor for the purposes of all bidding is not the freight rate which has been announced by the railroad company until the traffic committee says they can go ahead and use it.

In other words, the freight rate is not a freight rate until the Institute has informed the trade, and that appears with illustrations in the reports that I have submitted.

Mr. FERGUSON. You mean by that the freight which they add to their own price?

Mr. BURR. Yes. The rate of freight from the basing-point is a factor added to the base price. The actual delivery costs they have to meet. That is different from the charged freight, generally.

They have cooperated also with respect to the land-grant rates of the Government. Those are technical and I won't attempt to go into them, but that is an important factor and there is distinct cooperation to police the special rate of freight that the Government enjoys in connection with the grants which it made many years ago to western railroads. Lest those land-grant arrangements introduce a competitive factor and result in different bids at destinations in the West, the producers have taken important and careful cooperative steps.

In addition to that there are the steps that were taken to prevent delivery by trucking from injecting a price competitive factor into the industry. The demand for being able to obtain deliveries in some way cheaper to some destinations than by the all-rail freight factor was so strong that steel producers concluded that some concession must be made with regard to trucking. So they passed a resolution during the code period that anyone who wanted to take the goods at the mill wouldn't be charged the full all-rail freight to destination, but would be credited with 65 percent of the carload freight and he could take it himself, either by hired or his own truck, to destination.

Now then, that means that if the mill is willing to accept the base price to their local customers, they discriminate against the customer at a distance who adopts this privilege that I have described by penalizing him to the extent of 35 percent of the all-rail freight to destination. He comes and gets it and he pays 35 percent of the all-rail freight, and the company is under no obligation whatever to pay any of the delivery costs, because he has come and got it himself and he bears the expense of delivery by truck. But they had to make some concession and that is the concession they made. I am not sure whether that concession still holds.

On less-than-carload quantities, the buyer doesn't get the 65 percent off from the less-than-carload freight rates. If the man comes with a truck and gets less than a carload quantity, he then is given 65 percent off from the carload rate. Thus, the small buyer is discriminated against, as contrasted with buyers of carloads, in the matter of deliveries by customers' trucks..

Mr. FERGUSON. That is the freight from the basing-point.

Mr. BURR. Yes.

Now then, in all fairness I want to say that in this later inquiry we will have to check up and see whether that is still in vogue since the code. I simply don't know whether these auxiliary means of securing identical destination prices are still in use.

Mr. O'CONNELL. Do I understand, according to this practice, if I went to a steel mill with a truck or several trucks to get a carload of steel I would have to disclose the destination of the steel and the price would be based upon that destination?

Mr. BURR. This is a delivered price system. You can't buy it without giving your destination.

Now then, a great deal of care has been taken with respect to fractions. In some instances the fraction works out a little different in the delivered price, and if they don't carry it out to the same num-

ber of decimal points they may get to destination with a slight difference in price. For example, on April 11, 1935, just a few months before the code went out of effect, the Youngstown Sheet & Tube Co. wrote to the chairman of the Institute's traffic committee and stated that a W. P. A. project calling for about \$60,000 worth of pipe, in that case bidders had named a delivered price by carrying out decimals two places, as usual, but that the Republic Steel Corporation was awarded the bid "because they carried the basing point price three places, resulting in their bid being 12 cents low."

Mr. FERGUSON. Twelve cents a ton?

Mr. BURR. Twelve cents per unit, I presume. My colleagues tell me it was 12 cents on the entire job.

In other words, here you have one of the major steel companies complaining to the Institute, forsooth, because there was 12 cents worth of price competition left in the industry. Price competition breaks through the industry once in a while, but it is a pretty stiff wall.

Here is an illustration, occurring subsequent to the code days, of the efforts that they make to make sure that the tariff used by them, the freight-rate factor in the delivered price used by them, is identically the same.

On November 13, 1935, the Institute wrote one of the producers, the Newport Rolling Mill, as to a new railroad freight rate out of the Chicago-Gary production territory to a Wisconsin destination as follows:

In the meantime (that is, until the association's new amended freight tariff should be issued to the industry) in connection with the question raised in the second paragraph of your letter (that is, which tariff rates should be used), it is my understanding that until such time as the rates in freight tariff No. 2 are changed (that is, until the tariffs as issued by the tariff committee are changed) the rates to be used are those carried in freight tariff No. 2.

In other words, he was inquiring whether he could use the new tariff. Oh, no; he mustn't do that, gentlemen, until all steel mills changed, until they had given official notice to everybody that the change had been made. Then and only then can they use the new factor. That was in order that all should use the same identical freight rate so as to arrive at identical destinations up to one identical day.

The Commission, in its report to the Senate, has recited a great many cases of protest against the all-rail freight factor. These protests are by chambers of commerce, they are by individual industries located at river points, they are by water transportation companies and other concerns. Those will be found in the report to the Senate, pages 29 to 35. The reason why these complaints are made and the reason why the industry is so careful along this line appears in this testimony:

The CHAIRMAN (of the Wheeler Committee). I asked you a moment ago, and I will repeat it. You stated you would agree that unless steel mills calculated delivery costs in terms of a common mode of transportation, such as all rail, the delivered prices could not be identical at the place of delivery. That is the real reason for calculating delivery in terms of all-rail freight, is it not?

Mr. IRVIN. Yes, sir.

That is from the hearings, page 587.

The rule of the association carries decimal places to small fractions of a mill in order to eliminate the possibility of this 12-cent margin that turned that sale.

Then everybody is charging the same identical net cash 30 days, half of 1 percent if paid within 10 days, and the discount will be allowed only on the basing point value of the material. They all follow that identically.

Acting Chairman REECE. Mr. Burr, it is now about 12 o'clock. What is your wish with reference to when we should recess?

Mr. BURR. I have no wishes other than those of the committee.

Acting Chairman REECE. Is this a convenient place?

Mr. BURR. Any time, any place.

Acting Chairman REECE. The committee then will stand at recess until 2 o'clock.

(Whereupon, at 12 o'clock noon, a recess was taken until 2 p. m. of the same day.)

AFTERNOON SESSION

The hearing resumed at 2:10 p. m., on the expiration of the recess.

Acting Chairman REECE. Are you ready to resume, Mr. Burr?

TESTIMONY OF EUGENE W. BURR, ATTORNEY, FEDERAL TRADE COMMISSION, WASHINGTON, D. C.—Resumed

Mr. BURR. Yes, Mr. Chairman; I am ready whenever the committee is ready.

Acting Chairman REECE. You may proceed.

Mr. BURR. At the time that adjournment was taken I was endeavoring to tell the committee about the various methods by which the industry has closed subordinate avenues through which competition may leak into the industry. They have even gone so far as to make it less possible for the buyers of one producer, the customers of one producer, to compete in business with the customers of other producers. In other words, they have taken certain steps whereby they have fixed the resale prices of those who buy steel products from the producers of the steel industry.

I had a recent case come over my desk and it showed a rather careful investigation, a particularly careful investigation, of the Memphis area. The trade was in black and galvanized pipe bought from the steel industry and jobbed in the Memphis territory. It was shown that the jobbers of Memphis bought their supplies from the United States Steel Corporation, from Bethlehem, from the Wheeling Steel Corporation, Youngstown Sheet & Tube, Jones & Laughlin, all known as major producing companies, and also from a couple of warehousemen in addition.

These jobbers showed that they had, themselves, nothing to do whatever with their own selling prices. Those selling prices were made and modified, they said, on notice from the producers to them, and all changes from time to time were announced to these jobbers by each steel company for effectiveness on the same identical date.

How far that extends to other industries I wouldn't be willing to tell this committee at this time. I don't know, but that is only one of a number of similar cases where there is a considerable body of

evidence before the Commission that the steel companies are engaged in demanding that their customers themselves not compete, so that buyers of the Steel Corporation, for example, will have no advantage over customers of the Bethlehem and vice versa, all those customers selling on identical prices received from the companies themselves.

Now there are a large number of different methods subordinate to the main basing point methods which have been used. I shan't go into more detail on the matter. There are a number of others that might be brought out. I have brought out quite a few in my talk this morning.

This all, in my judgment, fits into the history of the industry, and by the history of the industry I am referring to the fact that heretofore the steel industry has been under fire in this matter of eliminating, through one device or another, competition in price. You are all somewhat familiar, I take it, with the *Steel Dissolution case*. There the Supreme Court referred to the United States Steel Corporation as a merger of mergers. That was the language used, if I remember correctly. That was in 1920. One of the reasons why the court by a majority of one decided not to dissolve the United States Steel Corporation, one of the reasons which very obviously sticks out, was that while the Corporation was formed by Judge Gary in 1901 the matter did not come up for decision till 1920, and the court remarked specifically upon the important financial and other readjustments, which had been made during the course of the intervening years. And it almost looks as though that decision rested chiefly upon economic grounds. For that I have no criticism to offer except this—and this is not a criticism of the Court either, in the slightest or of the decision that was then made—they did not have before them the fact that there was a system then in vogue, the basing-point method; a system of identical delivered prices, and the Court, having but one of the members of the industry before it, didn't consider the question of the basing-point system. So that the result was that they took cognizance of the fact that from 1901 to 1920 the percentage of business done by the Corporation had diminished rather than increased. From that they reasoned that there was no monopoly that had resulted from the merger of mergers which formed the United States Steel Corporation. But the case did not take one consideration into account, and that is this: That the merger was not a prerequisite to a monopolistic condition in the industry, and that through the basing-point system the buyer gets no more price advantage from there being many units in the industry than if they were all under one control, because under the formula system, price competition is almost obliterated and they all make the same identical delivered price, wherever you may name a destination; they all get in at the same price delivered. Now that feature was not before the Supreme Court.

In addition to that merger there have been other mergers in the industry that have taken place since, and that whole merger situation is being studied; I think Dr. Fetter is likely to refer to it tomorrow, and I do not intend to go into it, but it may be stated that the Department of Justice made an effort to prevent the last amalgamation of companies by the Republic Steel Corporation, and the Federal Trade Commission made an effort to stop the acquisition of certain companies by the Bethlehem Steel Corporation, and both of those efforts failed.

Mr. Kelley, Chief Counsel of the Commission has recently testified to you about the difficulty the Commission has experienced attempting to enforce section 7 of the Clayton Act as to acquisitions by one corporation of other corporations. Now, going further with the history of the elimination of price competition, after the formation of U. S. Steel Corporation. Following that was the period of the Gary dinners. That method was held unlawful by the third circuit in the *Dissolution case*, but they found it had been abandoned.

At the Gary dinners they made gentlemen's agreements as to what the prices should be for each ensuing quarter. Then there was a period when the industry had its zone prices. Those prices were similar to the present pricing system and resulted in identical delivered prices at any given destination you can name, made by all companies, the same as the basing-point system. Then, even before that period there were pools and agreements which Mr. Charles M. Schwab, chairman of the board of the Bethlehem Steel Corporation, testified about in the *Pittsburgh Plus case*. So that the Commission found that from 1873 there had been restraint of price competition up to the time that the *Pittsburgh Plus case* was decided in 1924.

Under all of these systems the same identical delivered character of prices at each given destination adhered: zone, single basing point, dual basing point with the Birmingham differential, and then later the present more multiple system. The more multiple basing-point systems were doubtless ushered in by the suit that was brought by the Federal Trade Commission and decided in 1924 to which I have already referred several times, the *Pittsburgh Plus case*. At that time there were great degrees of discrimination in price. It went so high that whereas Duluth had a production of certain products in the plant of the United States Steel Corporation and whereas that was right on Lake Michigan and they could put it out pretty reasonably, the price at Duluth was the price at Pittsburgh plus the freight from Pittsburgh to Duluth. It was \$13.20 more for a customer wanting to remanufacture and use steel as a raw material; it cost him \$13.20 more than it would a competing remanufacturer making goods at Pittsburgh. Now, that is a terrific handicap to anybody trying to remanufacture goods and get a general trade; it is prohibitive. At Chicago, under the Pittsburgh-plus system, the differential against the fabricator using steel as his raw material was \$7.60 more than the Pittsburgh man had to pay under the formula; \$7.60 made it impossible for a fabricator to sell 20 miles east of Chicago in competition with the Pittsburgh fabricator.

The largest steel fabricating concern at that time in Chicago, Morava Bros., testified that the system was a Chinese wall on the east boundary of the city of Chicago, and he couldn't go east in competition because he had to pay a short-haul freight on any job to the east, besides having to pay the rate of freight from Pittsburgh to Chicago.

Mr. BALLINGER. Even though the steel was manufactured at Duluth and at Chicago and this differential amounted to phantom freight, freight that never actually occurred. Is that correct?

Mr. BURR. That is correct. In other words, a producer of steel at Chicago would sell his steel at the Pittsburgh price plus the freight into Chicago, although he wasn't shipping it in at all, he was making it right there in Chicago, and Judge Gary testified that he was making it 18 percent cheaper there than at Pittsburgh.

Mr. FERGUSON. You mean plus the freight from Pittsburgh, not Chicago.

Mr. BURR. Did I say Chicago? Thank you very much.

Mr. BALLINGER. I understand Duluth is on Lake Superior, not on Lake Michigan.

Mr. BURR. Right. Thank you very much. Any further corrections, gentlemen, before I proceed? I am very grateful for them.

The thought is this. The manufacturer of building material or anything else at Chicago, buying steel as part of his raw material, might have it made at Chicago and he would pay, as the price to him, the Pittsburgh price plus the freight from Pittsburgh to Chicago, and if he wanted to send it over on his own truck he would still pay that freight. Judge Gary testified that it was made 18 percent lower cost at Chicago than at Pittsburgh at that very time, approximately.

Mr. FERGUSON. Mr. BURR, just for the record, although almost everybody knows, will you state who Judge Gary was.

Mr. BURR. Judge Gary was the head of the United States Steel Corporation for many years and was the leading spirit in the New York decision for the merger.

(Senator O'Mahoney resumed the chair.)

Mr. FERGUSON. He was at the time he made this statement?

Mr. BURR. Yes, indeed; yes, indeed. He was called as a witness in the *Pittsburgh Plus case*.

Following the Pittsburgh Plus decision, the multiplicity of the system was gradually broadened. Before we could get the matter before the Commission itself, Chicago was put in as a third basing-point, added to Pittsburgh and Birmingham, and the differential was reduced to about two to three dollars, as contrasted with \$7.60. Other basing points have been established from time to time, and as I mentioned this morning, quite a number of additional basing points on additional products were adopted last June. So that the system is now very multiple indeed, but there are still quite a number of small points of production that are not basing points and where this phantom freight which I have just told you about still persists to a certain extent, to a substantial extent. But the sectional character of discrimination as against Chicago or against Duluth or against Birmingham has now been wiped out because the Chicago and Birmingham prices, and the prices at most of the points of principal production, have been leveled off. That is not quite true of Duluth, however.

Mr. O'CONNELL. That wiping out only goes to the phantom freight. It hasn't affected the arbitrary character of the base price.

Mr. BURR. No; it hasn't wiped out the phantom freight entirely, but it has leveled the base prices at most of the important points of production, so that there is no longer a differential against Birmingham producers, or against Chicago purchasers of steel.

Mr. O'CONNELL. What I mean is, it hasn't affected the characteristic of the system in that the base prices remain the same.

Mr. BURR. It hasn't affected the system as a system of identical delivered prices or as to the elimination of price competition. The elimination of price competition is even simpler than it was before, because if they should want to penalize a man for cutting a price they can do it by putting a low base price at his point of production, in his home territory, where he would presumably still make quite a

percentage of his sales, cut it for that area, and they wouldn't have to cut the price for the entire country. Under the old system, if somebody got chiseling on the single basing point system they would have to cut the price at Pittsburgh in order to reach that chap. They would cut it for the entire country. If he was chiseling, we will say, on sheets, they would have to cut it in the entire country, and they would stand for a good deal of chiseling before they would take that much trouble and loss. Is that clear?

Mr. O'CONNELL. It is clear except the use of the word "chiseling." I take it you mean a person who would vary from the prescribed formula.

Mr. BURR. One who would vary from the regular formula; a man who gets behind that system and violates the understanding that exists in the industry to follow the system. But if he puts in a particularly low base price, it wouldn't fall within their definition, as I take it, of chiseling. They can go lower than his own base price and in that way reach him, so that a man who is in the industry is always subjected to a fear, and sometimes it is justified, of reprisal under the system, if he offers price competition.

Now, then, with each basing-point territory more restricted through the formation of more bases, you can penalize a man in his own home territory by putting in a particular base price there and sell at the old price elsewhere in the country, and still reach him very effectively.

Mr. BALLINGER. Don't you think the word "chiseling" is not as good an expression as just "trying to compete"? A moral stigma attaches to the word "chiseler," whereas these gentlemen were just trying to introduce competition in the steel industry.

Mr. BURR. I think the correction is well taken.

Now with regard to the origin of the system here, I want to read you something that Judge Gary said many years ago with respect to the origin of the system.

He said this:

It was deemed necessary for the orderly conduct of the business to have one basing price, and this was not alone for the benefit of the producer but for the benefit of the purchaser who in turn fabricated the steel which he bought into something else, finished some form of steel with it, and therefore desired stability of prices, something that was well understood so that every user of steel all over the country bought and used his steel on a certain basis, knowing in advance that everyone else who bought steel had to pay exactly as he did, with the addition of the increased freight, depending upon where he wanted to use the steel. (*Pittsburgh Plus* record, p. 11,736.)

In other words, the recognition right in the very beginning was that they wanted a stabilized—but more than a stabilized-price; that "stabilized" is a good word—but they wanted to have a fixed price that everybody would get and that everybody would know and from which there would be no deviation except by somebody who actually assumed the position of a price cutter.

Now then the system has, therefore, ever since the earliest days in the industry, been one under which every producer who was following the system would quote identically the same price at any given destination in the United States. I was one of the counsel for the *Pittsburgh Plus* case, and I examined one of the members of the industry and he said this: He said that if you would change the

letterhead and the signature, you could always use on the part of every company in the business, every producer of steel, the same letter of quotations for any given purchaser that you might want to name. You could always send him the same letter. The price at the basing point plus the freight from there to destination could be used by every producer if you just changed the letterhead.

How does the industry defend this system? Mr. Tower's idea of what constitutes competition has been clearly and recently stated by him, as executive secretary for the Institute. It may be a little surprising. "Competition," he says, "is at its perfection of expression when all of the sellers are on the same price level." That is the hearing of the Wheeler committee, page 269.

Gentlemen, I am not oblivious of the economic theory that sharp price competition may coexist with the making of the same price. If two retailers are on opposite sides of the street and one retailer cuts the price of sugar, the other fellow is pretty apt to drop down, but that is not the same thing. This is a system of identical delivered prices. Competitors have natural advantages which they reciprocally waive in order to arrive at identical delivered prices. The one retailer can't make the other retailer across the street come up in his price. He may induce him to go down, but he can't make him come up. But under this system any man who has control of the base price can make every other producer in the steel industry raise his price in the territory that is governed by that basing point. That is very different from the two retailers.

The CHAIRMAN. I would consider it a great advance in public understanding of the economic conditions which exist if I could prevail upon economists and witnesses like you to stop referring to corporations as men. I have observed time and time again that even courts, when passing upon cases which involve the interaction of these huge aggregations which are created by law under charter, constantly speak in the personal term, as "he," as a man, as a natural person when, of course, the truth of the matter is the fundamental trouble with our model economy is that all of these operations are carried on by corporations which are creatures of the State and are not carried on by natural persons.

Mr. BURR. The point is mighty well taken. I will try to observe it and if I fail I hope you will interrupt me.

The CHAIRMAN. It is a very natural use of language, however, may I say.

Mr. BURR. I have that to say for myself, anyway. Now, what has industry got to say for itself further in this matter? Quoting Mr. Tower again, he states the system this way—

As the result of that practice a producer no matter where located, may sell the products in any part of the country in competition with all other producers.

Page 273. He continues with this:

That fact is an advantage to the producer because it frees him from depending upon local markets alone to absorb his products. He may, if he desires, reach out for markets anywhere in the country.

Page 273. Again he says—

It is also an advantage to the buyer because he is not dependent on local steel producers either as to price, time of delivery, or quality of material. He, as a purchaser, may draw upon the entire country for supplies without penalty of price.

Now, I said this morning that different prices were made when differing net returns are received or are charged, if we may say so, by the producer. In other words, where he absorbs, we would say, more freight than he charges, he receives one—"it" receives one net return; whereas if it ships across the town, it receives another net return. In another place it may receive less freight than it charges, and so you have there three different kinds of net returns. I called them prices this morning, and I think that is what the Commission will hold them to be, but the Commission has this very thing before it, as to the meaning of the word "price" as used in the Robinson-Patman Act, and the Commission may decide quite differently from the view that I have expressed this morning.

However, the Commission considered in the *Pittsburgh Plus case* the meaning of the word "price" as used in the old Clayton Act before it was amended, and reached the conclusion that "price" was the net return received after the readjustment from the freight charged to the customer. In other words, the net realization is the actual price; what they will hold on this question now before them, or soon to be before them, in connection with the cement case, which is now being tried, I do not know. Since the Clayton Act was passed the Robinson-Patman Act has amended section 2 and the question of what is a price under the Robinson-Patman Act may be decided differently from the original decision under section 2 as first enacted in the Clayton Act.

Now, Mr. Tower's statement that I read you a moment or two ago, namely, that the buyers are satisfied by the basing-point system, for several reasons specified, is not entirely borne out if you consider the *Pittsburgh Plus case*—the basing-point case, from its historical standpoint. As a matter of fact, the buyers discriminated against under the old Pittsburgh plus system were anything but satisfied and some 800 of them bound themselves together as the Western Association of Rolled Steel Consumers, and about 200 banded themselves together as the Southern Association of Rolled Steel Consumers, and petitioned the Commission for the issuance of a complaint against the system, so that they were by no means well satisfied with it; and as a matter of fact, four States appropriated some \$55,500 to assist the Commission in fighting that case. Moreover, some 32 States bound themselves together as the Associated States Opposing Pittsburgh Plus as a result of the fact that the people in their respective territories were injured by the system. So that it has not been entirely satisfactory, considered, by and large, down through the years, to the buyers.

At the same time I think the committee should understand this—namely, that there is not as much protest from the buyers as you would expect under this kind of a system.

Buyers don't object to paying high prices if they can pass them along to the ultimate consumer, to the public. Many of them are practicing basing-point systems and other devices for the purposes of restricting price competition among themselves, and you do not hear the chorus against the system that we did hear against the old system of sectional discrimination. During the course of the years sectional discrimination has been wiped out; there is still discrimination, as I have illustrated to you, in that sometimes more freight and sometimes less freight is charged than is in the price at destination.

Mr. FERGUSON. Mr. Burr, isn't the principle all the same?

Mr. BURR. But the principle, so far as price-fixing devices are concerned, is all the same; the principle as regards discrimination is different. But the price-fixing feature is fully as strong, and, as I illustrated a few minutes ago, is perhaps a trifle stronger with respect to policing it. You can get after the man who strays away from the system more readily now than you could in the old days, and there is that distinction between the two. But as far as discrimination is concerned and as far as receiving the support for a change in the system from fabricators in Chicago because they are discriminated against \$7.60 worth for every ton, is concerned, that is done away.

The CHAIRMAN. Is there any justification for the system so far as you are able to see?

Mr. BURR. No economic or public interest justification for the system whatsoever. Now so far as the industry is concerned they think they profit by it. Personally I think they are perhaps a little short-sighted because they are destroying the purchasing power of the people, and that is the kind of thing I think we will have to agree—I am not an economist—brings on depressions. If you are going to have this kind of a system in a great many industries you have an effect upon the purchasing power of the public that is tremendous. In other words, you give a subsidy for one industry and, as I will show you in a very few minutes, everybody is doing it, or a great many are doing it, and these prices are higher than they would be, for the reason that competition fails properly to check prices and the public is paying for shipping the stuff all around the country.

Mr. FERGUSON. Do you know (I believe you have shown it before) how many industries in the United States employ the basing-point system?

Mr. BURR. That is my second point and I will come to it in a few minutes.

The CHAIRMAN. You refer to this as a fictitious freight.

Mr. BURR. It sometimes is called phantom freight or fictitious; yes, sir.

The CHAIRMAN. In other words, you mean by that it is a freight charge which the railroads never get.

Mr. BURR. Yes, sir; but it goes even deeper than that, Senator, for this reason: It is not merely the rate back of it, but it is the base price back of it that is put high enough so that it contemplates, as I read this morning from the testimony of industry men, that shipping all over the country will be indulged in as a matter of course, and is indulged in. The extent of it, how far it has been reduced by the June changes needs study. Cross-hauling may easily have been somewhat reduced by the reduction, the leveling off, of the former distinction between base prices at Chicago and Pittsburgh, Birmingham and Pittsburgh, Bethlehem and Pittsburgh, Buffalo and Pittsburgh, and those other differentials now taken off.

The CHAIRMAN. There seems to be a general agreement that the railroads constitute a sick industry. I was wondering what, in your opinion, might be the effect upon their income if the railroads actually collected this phantom freight.

Mr. BURR. If they collected it? If they collected all of the phantom freight, it might help some. The railroads, I take it, will profit if industry is restored to health. If you take some of these subsidies

off the back of the ultimate consumer, it is possible that industry will be restored to health, and with it will come a reasonable degree of business for the railroads, I take it. But I am not an economist, and I think I will leave that to Dr. Fetter.

Mr. FERGUSON. Doesn't it follow, Mr. Burr, as a matter of course, that if the railroad company actually received the actual freight on goods that were shipped from Chicago to Duluth, and the railroad company actually received the freight from Pittsburgh instead of it going into the pockets of the steel industry, it would be of benefit to the railroad companies?

Mr. BURR. Yes; of course, it would. You see the industries are not great friends of the railroads. What they do is to reserve to themselves the right to ship by truck if they want to, and if they ship by truck they still charge the all-rail freight. If they ship by water, they charge all-rail freight. There are some exceptions to that, but that is the general rule, as I read this morning from the testimony of Mr. Irvin.

Mr. BALLINGER. Of course, that wouldn't be a sound way to help the railroads. It would be just making them split up the boodle of the steel company.

Mr. FERGUSON. But if they hauled the freight from Pittsburgh—
The CHAIRMAN (interposing). Please don't misunderstand my question. It was designed merely to emphasize the fact that this is a fictitious freight charge which really does not purchase any railroad transportation.

Mr. BURR. Before I go further I would say that during the code period the industry tied up the trade against price competition very conclusively. Then, in May 1935, the Schechter decision supposedly destroyed the code system, but by formal resolution of June 6, 1935, more than 90 percent of the iron and steel producers' capacity throughout the country ratified a resolution adopted by the board of directors of the Iron and Steel Institute; and under that resolution declared their intention, among other things, "During the present uncertainty, to maintain * * * the standards of fair competition which are described in the steel code." They had already subscribed to the declaration of the code "that each member of the code, by becoming such member, agrees with every other member thereof that the code constitutes a valid and binding contract by and among all members of the code."

I fancy they may have departed from some of the features of the code, but I think the main outline of the code provisions, to eliminate price competition, and whereby it was eliminated, have been carried on through. Certainly the basing-point system and the identical extras and the other identical features have resulted in a great deal of identical bidding on the part of the steel industry to the Government, private, State and municipal authorities, in their purchasing to bring back prosperity to the country. In other words, that system has been foisted upon all buyers of steel so far as we can judge. We will have the facts more nearly brought down to date for you when we make our next presentation.

Mr. HINRICHS. I am a little confused about this phantom freight. I had understood first, that you felt that the steel was on wheels and was moving all over the country, so that Chicago was delivering

into what might be Denver territory, and vice versa, and that the cost of the extra movement, cross-hauling, was adding to the cost of steel to the consumer. Then you described the thing as phantom freight and indicate that, if the railroads got it, it might conceivably be advantageous to rail revenues. Is there some confusion? There is a confusion in my mind. Can you clarify it?

Mr. BURR. The phantom freight comes in here. Here is a man that is not at a basing point but he is producing steel. Suppose his basing point is at Pittsburgh, that covers that territory. Suppose he is selling right to his home town. He will charge the freight from Pittsburgh to his own home town, although he is producing it there, his customer is there, and his customer comes and gets it by truck. He will charge freight from Pittsburgh. That is phantom freight.

Mr. HINRICHS. Within a basing-point area there is phantom freight charged on steel that doesn't get shipped. As between basing-point areas there is freight which is moving. You don't know which of those two, in terms of revenues, is the greater.

Mr. BURR. We don't know which is the greater, and the Department of Justice is asking the industry for some facts which will show whether they collect more freight than they pay or whether it is vice versa. I am not going to pretend to guess which the answer is going to be, but I will say this to you, that it doesn't make any difference which the answer is. So far as the system is to be regarded from the standpoint of price competition it is absolutely immaterial.

The base price is put high enough so they can afford, and they do afford and it looks forward to their affording, to ship long distances, past the other man's point of production, clear on beyond, and still regard the business as desirable and acceptable.

Mr. DAVIS. Mr. Burr, isn't it also a fact that at least occasionally, if not frequently, a shipment could be made by water or by rail and water, or by truck, at a less rate than the rail-freight rate and yet, as you have already explained, the freight rate that is added to the base price is always the rail rate?

Mr. BURR. That is the general rule; yes, sir. There are some exceptions.

Mr. FERGUSON. Not from the point of manufacture or from warehouse, but from some fictitious point, some basing-point.

Mr. BURR. There are fictitious basing-points; yes, sir.

Mr. FERGUSON. Aren't all the basing-points practically fictitious?

Mr. BURR. The base prices; yes. If you are going to talk about basing-points as isolated from the industry, from the system, why, that is a little different question.

Mr. DAVIS. Another thing right in that connection, is it not a fact that there are not basing-points at all the points of production?

Mr. BURR. That is true, absolutely. It is still true.

Mr. DAVIS. And that if a shipment is to be made from a factory not located at a basing-point the freight is not from the point of location of the factory to the point of destination, but the freight that is added is from the basing-point, wherever that is.

Mr. BURR. That is right; yes, sir.

Mr. FERGUSON. And it may be 1,000 miles away.

Mr. DAVIS. One further question, Mr. Burr. You have been talking about the various basing-points, and the fact that last June there was an increase in the number of basing-points. Will you please explain whether all the basing-points in the aggregate are for each commodity or item of steel or whether there are different basing-points for different items?

Mr. BURR. There are different basing-points for different items. In Pittsburgh, for example, there is a basing-point for practically everything; I presume virtually everything. There may be some exceptions. Chicago or Gary are basing-points for almost everything. Birmingham, for a large percentage of steel products, and so it goes.

Mr. DAVIS. Well, that isn't the matter that I was undertaking to list. To be more specific, I will ask you whether or not it is a fact that with respect to each item or commodity in steel, and particularly the ones in most common use, there is only a relatively small number of basing points for each commodity?

Mr. BURR. Well, there has been quite an increase. I wouldn't say it was relatively small. There's a substantial number of basing-points for the big commodities, a dozen or so in some; that is not true for sheets. There was quite a long while there when Youngstown, the principal producer for sheets, was not one and Pittsburgh, which produced none, was a basing-point, but the changes last June have changed that situation quite an extent so that most of the important points of production are basing-points for most of the products. That is true today, but if they were to make every point of production in the United States a basing-point, that would not change the price-fixing character of the system, because every time one producer went into some other basing-point territory, governed by any other point under the system, his formula price would be made right there and the freight from the basing-point to destination would be the same freight factor as charged by all other producers.

The CHAIRMAN. In other words his formula would be made by the rule applying in the district to which he shipped?

Mr. BURR. Yes; his price would be automatically fixed for him unless he was what Mr. Irvin said is a price-cutter; in other words, as long as he stays within the industry and lives up to their system he is always using the other man's base price in the other man's territory—plus the freight from the other man's basing-point to destination. Pig iron is an industry with almost every production point as a basing-point, but that does not mean that it is not a basing-point system with identical delivered prices for everybody that is in the industry.

The CHAIRMAN. Now your contention of course is that this results in an unwarranted and perhaps extortionate charge upon the consumer; am I right?

Mr. BURR. The charge upon the consumer is placed at an artificially high level by the system.

The CHAIRMAN. Unwarranted from your point of view?

Mr. BURR. Unwarranted from my point of view; yes, sir; unwarranted in law and economics, I believe, if I may express myself.

The CHAIRMAN. You also contend that it is maintained by the industry primarily for the purpose of fixing and maintaining prices?

Mr. BURR. They would not go to any such degree of trouble unless that was their effort.

The CHAIRMAN. Now does not industry—

Mr. BURR (interposing). It is wholly meaningless unless that is the purpose and the result.

The CHAIRMAN. Does not industry defend the system upon the ground that perhaps it leads to standardization of prices and stabilization of markets?

Mr. BURR. Yes, sir.

The CHAIRMAN. Now what is your view with respect to that contention?

Mr. BURR. With respect to the contention of stabilization, why I think it does stabilize the price. I think it crystallizes, freezes the price.

The CHAIRMAN. I said fixing the price and stabilizing the industry. Is there any justification, from your point of view, after your long study of this system, for any contention that the stabilization of industry, which it is alleged proceeds from it, is a benefit?

Mr. BURR. It is not a benefit to the ultimate consumer, and I think it is even questionable that it is beneficial to the industry, because I think it drives the ultimate consumer off the markets. It gives a subsidy to the industry, what amounts to a subsidy, and what amounts to a special privilege to the industry, and that special privilege, that special subsidy, cannot lead to anything except a subsidy to labor, subsidy to agriculture, subsidy to the white-collar man; and the ultimate consumer's back is broken. It drives him off the market and you have depression.

The CHAIRMAN. Is it your point of view that the system which should prevail would be one under which the producer would sell his product at the cost of production where he produces—you see I am falling into the same error that I criticized you for a few moments ago—the producer would sell the product at the cost of production, plus a fair profit, plus the actual freight to the point of delivery?

Mr. BURR. I would put it a little bit differently, if I may venture to rephrase that, rather than say yes or no. I would say this; it ought to be placed where the price is a competitive price, the result of the play of the forces of supply and demand, operating without understanding on the part of competitors for the purpose of lessening or destroying price competition. I would say that under our competitive system, a man who is particularly well located as regards his raw materials, and his market, will charge, and under our system is expected to charge, a good fat profit until somebody else puts in a plant there and competes with him.

In other words, I am not looking forward to a system under which we will say what is a fair profit and what is a fair price, but a competitive system which will result, if our economics are correct, in a fair price through the play of the forces of competition.

The CHAIRMAN. When I used the phrase "fair profit" I was using it from the point of view of the producer and not with any thought of having a fair profit determined, either privately or publicly, for an industry. I quite agree with your expression of the desirability of competitive prices generally, but I was trying to elicit your point of view with respect to what the result of this competitive-price system would be upon—if at all—the decentralization of industry.

Mr. BURR. A competitive system is going to decentralize industry. When it comes to this question it seems to me the line of demarcation might be illustrated like this: A man producing at Pittsburgh or Chicago under a competitive system would not get more than a fair profit; he will get a small margin of profit; but suppose he were the first man on the Pacific coast to put in a plant, and suppose he had a fine market there and all that kind of thing; I would expect he would get probably more than what we would say was a fair profit. He might be getting a big profit out of it for a while, but it would result in somebody else, under the competitive system, going into business there and on the Pacific coast there are several of them.

Now, a man starting in Pueblo all by himself, with plenty of coal and iron right close by, I would expect that fellow, under the competitive system would make a wonderful profit for a few years, until some competition went in there, and I would not say it was unfair or uneconomic under the competitive system for him to take advantage of his territorial situation there, as long as it lasted; that is, the competitive system; get all you can; but to eliminate these things that artificially curtail price competition, that is what we are shooting at.

The CHAIRMAN. But the basing-point system itself standing alone does not have the effect of eliminating development of competition, does it?

Mr. BURR. The basing-point system standing alone? Why, it is the antithesis of price competition.

The CHAIRMAN. I mean it hasn't actually resulted in suppressing competition, even in the steel industry.

Mr. BURR. Not all competition—no, sir; but it has suppressed price competition except in these sporadic instances when the dam gives way and some water trickles through. Price competition has to be distinguished—there are several varieties of competition, there is personal competition that may be rendered more spirited and more bitter, co-incident with the elimination or restriction of price competition.

Dr. THORP. I wanted to inquire whether the large profits which you feel have come out of this system have resulted in an expansion in the steel industry itself, that is if it is logical that a local situation with large profits will lead to new steel developments in that circumstance, why won't a high level of profits through an entire industry as the result of such a price structure lead to a marked expansion in the whole industry?

Mr. BURR. The system has certainly held an umbrella over badly located plants, over inefficient plants, and the last report of Mr. Myron Taylor, of the steel corporation, indicates that they have now eliminated a lot of obsolete plants that have been obsolete for a long time, and they have been carrying them along. I deduce from that and previous reports that they carried them long after they became obsolete. The umbrella is held over them, but I think it is an unhealthy condition rather than otherwise. I think plants should stand on their own legs. We don't want a condition of paternalism where we are carrying and protecting units of large concerns or independent concerns; that is all done at the expense of the ultimate consumer, he

is the fellow whom after all you have to look after, and when he is unable to buy we are all caught.

The situation there has been one of holding the umbrella, artificially, over certain units, and some of those units apparently are obsolete or badly located. Does that answer the question?

Dr. THORP. Not quite. Is there an evidence of new enterprises taking advantage of this umbrella?

Mr. BURR. I wouldn't be able to say as to that. Yes; I think that is quite probable; yes, I think that is true. I wouldn't like to specify individual cases, though I have one or two in mind, but that is getting a little too personal and I don't want to call names and faces on that.

Mr. BERGE. May I ask what effect, if any, do you think this system has had upon the volume of steel production? You say it has kept alive certain inefficient plants. You don't mean by that that it has kept the level of steel production higher than it otherwise would be.

Mr. BURR. No, indeed; I think it has restricted steel production.

Mr. BERGE. Restricted it, I suppose, because it has maintained higher prices and thereby cut down the consumption.

Mr. BURR. Yes. If you put your base price high enough so you can ship long distances past interviewing points of production, that means that you are charging the remanufacturer and the ultimate public more than they would be charged under a purely competitive system. If you reduce the prices it may reallocate the business to some extent, but there would be just as much consumed as there was before, there would be just as many men employed in making the larger volume that would result from a reduction in prices.

Mr. BERGE. Probably more, wouldn't there?

Mr. BURR. Yes; there would be more, indeed there would, in my judgment. You don't have to have a Ph. D. in mathematics to add up a column of figures; it looks to me like that is a column of figures. You don't have to be a trained economist to see some things in economics. I notice the economists talked about the effect of law decisions—I hope I am not trespassing upon their prerogatives.

The CHAIRMAN. Of course, we all know that as lawyers, Mr. Burr, we won't cover the whole field.

Mr. BURR. Here is what Mr. Charles M. Schwab, chairman of the Bethlehem Steel Corporation, speaking to the Institute in 1929, said: "One of the principal instances of such waste"—that is of distribution—"is the cross-hauling of steel products. It is manifestly uneconomic for a steel manufacturer in Chicago to ship 100,000 tons of steel to Pittsburgh at a time when a Pittsburgh manufacturer is shipping a like quantity of like material from Pittsburgh to Chicago. The sales in each case must be made at prices prevailing in the districts where the steel is sold, and consequently the sales prices net less to the manufacturer in each case than they would have netted if the Chicago manufacturer had supplied the Chicago market and the Pittsburgh manufacturer the Pittsburgh market."

Further on he remarks:

All steel manufacturers know that at the end of the year they have not changed their relative rates of operations as compared with those of their competitors to any appreciable extent, so that the net result of the cross hauling of materials has not been to increase the output of the individual producers by any appreciable amount. It has merely served to dissipate a part of their profits in unnecessary transportation.

He is thinking about the producer.

I would say to you it has resulted in the ultimate buyer's bearing a burden which otherwise he wouldn't have been called upon to bear.

The executive secretary of the institute said that: "In no industry is there keener or more severe competition;" that is, meaning than in the steel industry. "This is an actual result," he said, "of the basing-point method under which a large number of producers are enabled to compete at a given point. The greater the number of sellers seeking orders in any consuming area the greater competition. Conversely, the fewer the number of sellers the less the competition."

But, gentlemen, bear in mind that that is personal competition. It is not price competition. It isn't in quality, for in much of the steel business, much of it is just standard stuff, you know. There is no price competition there and such competition as is secured to the buyer is in these other things, and the question of price competition—they all go in there at identically the same price.

Mr. BALLINGER. Competition in the art of making friends and contacts, isn't it?

Mr. BURR. Right. That is well put.

Now then, have I said enough about the changes last June? I believe I have, Mr. Chairman. The changes last June were, first, to put in a lot of basing points on a number of products which had not been basing-points for those products before; the establishment of some basing-points in certain products that were never basing-points for any product before. So much for the increase in the number of basing points.

Secondly, was the leveling off or equalizing of the base price at most of the principal points of production with the Pittsburgh base prices in those commodities.

Thirdly, the reduction of the price at Pittsburgh so that at other points there was a double reduction in price due to the reduction at Pittsburgh and the leveling-off of the differential that had existed before. Is it clear?

Those are the three points. That is all the changes that were made.

That lessened the discrimination feature to some extent. It certainly does, but it does not affect in the slightest this system as a means for arriving at identical delivered prices throughout the country.

May I sum up with regard to steel, and then I want to say a few words as respects the delivered prices in other industries?

The basing-point system is a system of identical delivered prices, and to it they have added the identical character and prices of extras of all kinds, extras being more important in many cases than the base price itself and much more important than the freight element. In other commodities they don't amount to much. They have also fortified it with identical discounts, identical treatment of buyers, including retail price maintenance, which I illustrated this morning, identical deviations from the system which they have put in at particular points.

They put in for southern Michigan some special features which resulted in discriminating in their favor as against the people in

the automobile industry, buying on the other side of the State line, and people in Toledo, Ohio. In other words, they have patched up the system, by identical action always. If one does it, they all do the same thing under their agreement.

In other words, the system has been so top-heavy and artificial that they have had to patch it up here and take care of this interest there and take care of this man at Duluth. At Duluth they made a special concession for a manufacturer of hand agricultural implements. They made a special concession for him. In other words, these things have to be patched up and then they all do the same thing, and it is all done by concordat.

Now, among the effects—

Mr. BALLINGER (interposing). When did the basing-point originate in the steel industry?

Mr. BURR. The basing-point in the steel industry originated pretty close to the turn of the century.

Mr. BALLINGER. How many years would you say it has been continually in operation in the steel industry?

Mr. BURR. Well, there was a little period of zone prices, but considering that as a mere variation I would say it has been in effect about 40 years. In fact, some member—I thought I read that this morning—of the industry said 40 years. I think. If not, it is admitted.

Mr. BALLINGER. Then, Mr. Burr, if it is true that it is shown that the basing-point system is a simon pure monopolistic device, it is true that steel has been the most successful monopoly and the most enduring one in the history of American industry.

Mr. BURR. If you are going to refer to monopoly in the general sense as contrasted with concentration in the hands of but one unit; yes. In the modern sense of monopoly as you have used it correctly speaking, it is a monopoly. You can't get around it, gentlemen. If you are going to have the same identical delivered price made by mutual understanding through the industry, it can't be anything but monopolistic.

What advantage is there, as to standardized commodity, in being able to buy it from several producers in various parts of the country, if it is all at the same price, delivered to you? It might just as well be made by the same producer.

Among the effects is to give an excessive share of highway and waterway advantages to the steel mill. They charge, as a rule, the all-rail freight, and then they arrogate to themselves the privilege of hauling it to destination by truck or by water, if they can save by it. But if the buyer hauls it from the mill by truck he must pay to the steel mill 35 percent of the all-rail freight for the privilege of accepting delivery at the mill. Thus the buyer must be able to make delivery arrangements below 65 percent of the cost of rail delivery in order to effect a saving by making delivery under his own or hired trucks.

Also, it deprives persons of their natural advantages of location; also, its effect is to give others an artificial equality in spite of natural handicaps in their location; to undermine incentives to economical production and distribution; to continue obsolete mills long after they would have gone out of business if price competition had prevailed in the industry; above all to deprive the public of the benefit of price competition by barricading all avenues and alleys through which such competition can reenter the industry, except that of viola-

tion of the agreement of the industry to employ the basing-point system.

It should also be borne in mind that almost all of the steel that is sold by the producers goes into remanufacturing. A good deal of it passes through one or two middlemen. Those middlemen sell on a mark-up, so that there is a snowball effect to this thing rolling up the amount of the overcharge due to the elimination of price competition. It rolls up when the middlemen price it to the man who buys from them. Then, if it is sold to a remanufacturer instead of to middlemen the remanufacturer in his turn figures it in as part of his costs, and whenever he makes a sale, suppose it is agricultural implements, it figures in his cost. He sells to middlemen and the wholesaler marks it up 15 percent based upon that increased cost as well as the rest of the costs; and then the retailer probably marks it up 35 to 50 percent of his purchasing price, so that you have got the thing passed along to your ultimate consumer far larger than it was when it left the steel corporation in the first instance.

I was asked the time when this was brought into existence. The basing-point system was introduced at differing times for different industries. I got that a little bit too early, Mr. Ballinger. It was 1902. I think I said about the turn of the century. It was introduced by the bar manufacturers by agreement in 1902. That was according to the Commission's findings in the *Pittsburgh Plus case*.

Then it was introduced by agreement by the plate and shape manufacturers in December 1903; the nail manufacturers took it up in 1904; the tube manufacturers agreed upon it. That seems to have been in 1900, and billets in 1900. Some of it was at the turn of the century.

Bolts and nuts and rivet makers didn't go into it until 1918; tin plate, 1903; sheets, no date of agreement was expressly found by the Commission.

All that is to be found in Eighth Federal Trade Commission Reports, pages 36 to 38.

Pig iron, as I told you before, didn't go into it until the code, but they were already arranging for it before the code was drafted.

Mr. Tower testified before the Wheeler committee that the basing-point method of quoting prices existed for many years before the code was heard of. It was used during the code period—

quite unchanged from what it was before the code incident * * * and it is still being used, and the code incident has nothing whatever to do with the consideration of the basing-point method of quoting prices and its effect upon either producer or consumer.

That is page 253 of the hearings.

Mr. Tower also declared that—

the basing-point method of quoting steel prices has been in use in the industry for more than 40 years.

Mr. DAVIS. Will you explain in this connection who Mr. Tower was at the time he gave this testimony.

Mr. BURR. He was still executive secretary of the Iron and Steel Institute, and is so today.

Gentlemen, I submit to you the proposition that since 1873 producers of the iron and steel industry have shown no loyalty to the competitive system in this country, considered as a class, and yet I

think they are patriotic American citizens. I think they would have their sons going over the top if there was another war. They are men of great ability, but I think they are misguided so far as the real welfare of even their own industry is concerned. I think they are oblivious to the fact that if they do it, others will do it, and if they get away with it it is only at the expense of the ultimate consumer, and that that means depression for them as well as for the rest of us.

IDENTICAL DELIVERED PRICE SYSTEMS IN INDUSTRIES OTHER THAN STEEL

Mr. BURR. Let me turn briefly to my second topic—I don't know how long it will take—to the system as it has spread from the iron and steel industry to other industries. There are a couple of other methods for arriving at identical delivered prices in industries. One of them is what is known as the freight-equalization system. That is substantially the same kind of system as would exist if you had a basing point at every point of production. There all they do is to equalize on the bill the freight factor with the freight, the all-rail freight, which would be charged by the producer nearest, in terms of freight charge, to the customer being quoted.

Is that clear? In other words, all you have to do is to find out which producer of the product has the lowest freight rate to the customer; then if you are not that particular producer you add to your price at the plant, that corporation's freight rate and that is your delivered price. All use the same rate for the same buyer. The system doesn't work, or isn't worth working, I would say, unless they have some kind of an understanding whereby on the same commodity they have the same plant price.

Mr. BALLINGER. The same base price.

Mr. BURR. You can call it base price; they don't use the word "base" price in industries that are organized that way, that I know of. That is as distinguished from delivered price; yes, sir.

Then there is the zone system. That is still more artificial and difficult to defend. The zone price system is this. The country is divided up into various zones, and then there is some equalized freight charge that is made and is decided to be applicable for the entire zone. In other words, if New England is a zone, the price will be fixed with a freight element which will be identical throughout New England, so that when they sell in New England there is always the same freight factor made throughout that territory. That is quite discriminatory when you reach the boundary of the zone, the inter-zone boundary. To illustrate, if east of the Mississippi River is one zone, and if the western zone has a higher freight factor, then the man who is on the boundary at the river will pay less, if he is on the east side, and more if he is on the west side of the river, than he would pay if he were across the river. The most important feature is not discrimination, but that the system so results for "competing" producers, that they all deliver in each zone, throughout the zone, at the same price identically, provided their basic price is identical, and they don't go into this zone business unless it is. In other words, there is some industry leader or some agreement with regard to the basic price, and then in the zone delivered prices are identical for

they have added the same arbitrary freight factor for that zone to the same basic price.

Representative REECE. In these cases how is the basing price arrived at?

Mr. BURR. That you would have to investigate in the individual industry. I am not going to generalize on that because I am not in shape to. I don't want to tell you that they follow the leader or that they agree upon price among themselves unless I know exactly what the situation is. That would vary for various industries, but the thing is not worth following unless they have an identical price system of one kind or another.

Now the Commission issued an order to cease and desist on an uncontested case in the United Fence Manufacturers case here only a few months ago. That was a zone system for the 14 northeastern States under which all the manufacturers made an identical delivered price in that zone of 14 States. In other words, an identical delivered price, wherever it was. A man might manufacture in Maine and deliver in New Jersey, or vice versa. It would be all the same price. That is the same freight factor would be added and if their prices were identical, why that would bring you in the same delivered price in each case.

Now with respect to the various systems of delivered prices, I would like to do what I did this morning and submit certain documents here for the information of the committee, and not of course for reprinting in any way. This includes the Commission's Price Bases Inquiry, with Particular Reference to the Basing-Point Formula and Cement Prices, dated March 1932. This was an economic investigation made by the Commission, and it was very comprehensive. I would like to offer that.

(The document referred to was marked "Exhibit No. 345" and is on file with the committee.)

Mr. BURR. Also a document, No. 71, of the Seventy-third Congress, first session, entitled—this was Senate document—"Cement Industry," with covering letter, addressed to the President of the Senate.

(The document was marked "Exhibit No. 346" and is on file with the committee.)

Mr. BURR. Now these are on the multiple basing-point system in the cement industry. Then the Commission made a study of the zone price formula in the range-boiler industry some years ago. This was submitted to both Houses of Congress, I believe—yes; submitted to the President of the Senate and the Speaker of the House of Representatives. This was March 30, 1936. This, I think, is the last copy we have, except the file copy. It should have been printed but the Commission has never had the money to print it, and I submit it to you for your information.

(The manuscript referred to was marked "Exhibit No. 347" and is on file with the committee.)

Mr. DAVIS. You are referring to documents filed with the Senate on the cement industry. Did you mean that, or the steel industry?

Mr. BURR. Cement; yes, sir. I am presenting the documents now in other industries; I am through with steel.

The CHAIRMAN. These documents may be received, to be filed with the various other reports of the committee, not for printing.

Mr. BURR. Thank you, sir. Now I think it would be a good idea for the committee to have the complaint and the principal answer, that of the Cement Institute, in the proceeding now being conducted by the Commission, being tried by the Commission.

The CHAIRMAN. Well, those proceedings have not yet been completed?

Mr. BURR. No, sir; they have not, but the complaint and the answer are public documents; they are complete so far as they have gone and I thought that the theory of the case might possibly be of interest. Of course, that is not decided and this does not make a prima facie case at all; it merely states the reasons which the Commission has to believe that the Patman Act as well as the Federal Trade Commission Act have been violated.

The CHAIRMAN. Well, the documents may be received, to be placed in the files.

(The manuscript entitled "Complaint" and "Answer," both Docket No. 3167, was marked "Exhibit No. 348," and is on file with the committee.)

The CHAIRMAN. May I ask, Mr. Burr, with respect to these other reports which you have offered for the information of the committee, whether the industries affected have on any occasion submitted to the Commission or published any sort of comment upon or response to them? Apparently none has been called to your attention.

Mr. BURR. I don't recall; I don't think so; no, sir.

The CHAIRMAN. Thank you very much

Mr. BURR. Now, I have here also the Commission's report including its findings and conclusions of fact and of law in this zone price case that I told you about a moment ago as to the United Fence Manufacturers' Association, producing snow fence. This was dated—this is a recent case and the report was issued and the order to cease and desist was served on July 13, 1938. That is your zone price system and illustrative of it. I would like to offer that, if you think it is appropriate.

The CHAIRMAN. Without objection, it may be received.

(The manuscript was marked "Exhibit No. 349" and is on file with the committee.)

Mr. BURR. Now I do not believe that I need to go further into the zone price system, or the freight equalization system by way of description, unless some member of the committee desires to ask some question, or submit some comment.

The CHAIRMAN. I think Mr. Ballinger wants to address a question to you.

Mr. BURR. All right, sir, I would be very glad to hear it.

Mr. BALLINGER. I think, Mr. Burr, some time previous in your testimony you said that you were aware that where competition was intense and vigorous that there might be a case of uniform prices in the market. Now, when the steel industry deals with the United States Government could there by any stretch of the imagination be a competitive situation with all these facts before us:

First of all, the bids are submitted secretly, is that not correct?

Mr. BURR. Yes, sir.

Mr. BALLINGER. If a man were acting in a true and competitive manner he would not be telling his rivals what his price was going to be?

Mr. BURR. Correct.

Mr. BALLINGER. And that would be against his self-interest, and yet is it not true that bids received by the United States Government are identical to four decimal points?

Mr. BURR. Yes, sir.

Mr. BALLINGER. And therefore by no stretch of the imagination could that be called competition in the steel industry dealing with the United States Government, at least? That is to show what the situation is in dealing with private business.

Mr. BURR. The same is true in many States where concealed and supposedly secret bids are required by law to be submitted and the same is true in the case of many municipalities throughout the country. Not all of them, probably. Now, in the price bases inquiry of March 1932, which related chiefly to cement, there was a showing that the preliminary studies of numerous industries showed a widespread delivered price system in various lines of industry, not that it was unanimous; it did not show it was unanimous but it showed that the basing-point system was working into a large number of industries and among these were listed food products, textiles, lumber and lumber products, paper and paper products, chemicals, rubber and finished products, leather and finished products, clay, steel, machinery, transportation equipment. That is on page 12 of the exhibit that you received a moment ago (No. 349), Mr. Chairman. Now, in speaking to the Wheeler committee, Commissioner Freer, of the Federal Trade Commission, said that among the industries having basing-point systems which the Commission had been investigating, were steel, pig iron, cement, lumber, and sugar, as basic industries. Also range boilers, bolts, nuts and rivets, cast-iron soil pipe, asphalt roofing, power cable, linseed oil, denatured alcohol, and corn derivatives. That is the hearings that you received this morning, page 309.

We had a check made just the other day, or recently, in the Federal Trade Commission of the codes adopted a few years ago, as indicative of the existence of delivered price methods of the class of basing-point systems, in various industries. The codes indicate that basing-point systems are followed in these industries: Iron and steel, lime, retail lumber, glass containers, builders' supplies, farm equipment, ice, motor-vehicle retailing, road machinery, paint and varnish, business furniture, liquefied gas, auto parts, ladders, paper and pulp, structural clay, china and porcelain, reinforcing materials, vitrified clay sewer pipe, antifriction bearing, retail food and grocery products, end grain strip wood block, wholesale food and grocery products, retail farm equipment, construction machinery—district trade, paper-bag manufacturers, lye, ready-mixed concrete, wholesale coal.

Among zone systems indicated by the codes are: salt producing, farm equipment, ice industry, fertilizer industry, road-machinery manufacturing, floor and wall clay-tile manufacturing, shovel and drag line and crane, reinforcing materials, vitrified-clay sewer pipe, valves and fittings, cast-iron pressure pipe, paper-bag manufacturing, cordage and twine, ready-mixed concrete.

Inasmuch as the codes were not revolutionary but were rather declaratory of preexisting conditions in the main—that is not true

in pig iron and may not be in others—the chances are that these devices which are spreading over the country have not been departed from if they were adopted prior to or during the code period; the chances are that they are still doing something along the line of delivered-price systems of one kind or another if the codes indicate that such was the case. I don't present this as absolute proof, it would hardly be either fair or judicial to do so, but it is symptomatic of the conditions in that group of industries.

The Honorable Harold L. Ickes, Secretary of the Interior, testifying before the subcommittee of Senator Wheeler on this basing-point bill, the printed hearings¹ from which I read portions this morning, pointed out that in purchases by the Government under his administration between June 1935 and March 1936, less than a year, you see, identical bids occurred at least 257 times involving a gross expenditure, he said, of \$2,866,252.97 (page 286).

This was exclusive of these huge reclamation projects which were then being handled by the Secretary.

The CHAIRMAN. Mr. Burr, you have about finished, have you not?

Mr. BURR. Pretty nearly; yes, sir.

The CHAIRMAN. I wonder if it would be asking too much if I should request you to put that in the record now without reading. That buzz is a signal that apparently there is about to be a vote in the Senate and I should like very much to respond to the roll call.

Mr. BURR. Yes, sir.

The CHAIRMAN. With that understanding, the remainder of your statement may be incorporated as part of your remarks and the committee will stand in recess until tomorrow morning at 10 o'clock, at which time Professor Fetter will take the stand for the Federal Trade Commission.

(Mr. Burr's additional statement follows:)

Among the points made out by Mr. Ickes are the following:

(a) That it was "practically impossible for the Government to comply with section 3709, Revised Statutes, which provides that awards must be made on the basis of competitive bids" (Hearings, p. 286).

(b) It was necessary for the Department in certain cases to resort to choosing the successful bidder by lot, in violation of the statute (p. 290).

(c) In other instances, under his direction award was made to the producer "farthest removed from the project on the theory that we would get a little extra railroad employment out of it anyhow" (Id.).

(d) At times bids were rejected and new proposals asked for but almost always identical bids were again submitted. On one or two offers f. o. b. mill bids were submitted but subsequently producers "refused to bid that way." The result was loss of time in the employment of labor and the construction of the project (Id. p. 291).

(e) The "identical bids are high bids. And high bids means that it takes more money to build a project than if materials could be bought on a competitive basis" (p. 289).

(f) "If we have a certain sum of money with which to build projects in order to give work to the unemployed, the result of paying high prices for materials means fewer men put to work * * *. The more money paid out for materials, the fewer the projects for the money and the fewer persons given work" (p. 289).

(g) As to settlers on the great reclamation works being built under his administration, Mr. Ickes remarked, "they are able to meet their payments only by great industry and self-denial and if costs go beyond a certain point it will become necessary to give up the building of such projects" (p. 287).

¹ Refers to "Exhibit No. 344" on file with the committee.

(h) * * * a heavy burden" has been thrown "upon municipalities and other public bodies. In many instances local authorities have been subjected to high-pressure salesmanship, which has not had a healthy effect on municipal morale" (p. 290).

(i) Mr. Ickes has reached the conclusion that "if the Government would build two or three cement plants I have not any doubt in the world but that not only the Government but the general public would receive tremendous benefits."

(j) Mr. Ickes suggested that of equal importance with the slogan "Buy American" is a possible slogan, equally important, of "Sell American."

Mr. Ickes gave a list of the following 48 different lines of material and equipment upon which identical bids had been received for purchases under his Administration (p. 287).

School equipment	Valve boxes
Typewriters	Turbogenerators
Steel lockers	Condensers
Typewriter stands	Well drilling
School desks	Fire hydrants
School chairs	Fire-alarm sirens
Auditorium seats	Pumps
Tables	Plumbing and heating specialties
Armchairs	Feed water heaters
Padlocks	Aerators (sewage)
Hospital and office equipment	Pipe covering
Fire extinguishers	Electrical transformers
Classroom desks	Cast-iron pipe
Operating-room equipment	Water meters
Kitchen equipment	Copper pipe
Glass and glazing	Electric locomotives
Switchboard	Stokers
Stage equipment	Machine tools
Lighting standards	Creosoted poles
Sewing cabinets	Filter equipment
Structural steel	Heavy crane
Steel tanks	Tractors
Steel sheet piling	Transmission-line equipment
Reinforcing steel	Electrical cable

Mr. Ickes further pointed out that there is an "increasing tendency" toward the extension of the identical delivered price bidding. This trend is particularly noticeable on different makes of machinery.

Mr. Ickes pointed out further that the tendency is for bids made on proposals for equipment to specify identical efficiency of the machinery, and so forth, so that various industries present an "impregnable phalanx of common prices and identical performance."

EFFECT OF IDENTICAL DELIVERED PRICE SYSTEMS UPON THE PUBLIC INTEREST

Mr. BURR. This great prevalence of identical delivered price systems in American industry, as a device for the enhancement of prices and the elimination of price competition, brings me to my third and final topic—the effects of these systems. This, in view of what has already been elicited by questions, can be briefly presented.

These identical delivered-price systems, supported often by auxiliary devices, so far as they are adhered to, result in all buyers, public and private, being quoted and charged identical delivered prices, at their respective locations, by all supposedly competing producers.

They result in the complete abrogation of price competition. The producers merely follow the formula used by the industry and each

knows what the bids of all others will be at each destination at any given time. If any producer does not follow the formula, its officers are subject to the "social penalties" which, as already quoted, the Supreme Court found to be more "potent" than forfeitures.¹

Unless the country is to remove these basing-point systems through appropriate means, they will be continued in the many industries already having them, and will be adopted by other industries in which there is a desire to eliminate price competition.

Businessmen have shown very widely that they regard the competitive system as excellent—for the other fellow. If left at liberty to do so, they will place, and are now placing, base prices so high as to compensate them for the sharing of their own nearby territory, where they have a natural advantage, with remote producers; while they receive in return the privilege of selling in the local territories of other producers without fear of low prices or price competition.

This means a drastic lessening of the incentive to efficient production and distribution, as well as the destruction of other benefits of price competition.

All of this is obviously at the expense of the ultimate consumer, as a class. The public are deprived of a substantial part of their purchasing power.

Unless this situation is remedied, we shall have failed to remove one reason for the inability of consumers to buy enough products to keep producers, both capital and labor, employed, probably a primary cause of overflowing warehouses, closed factories, unemployment, depression, and high taxation.

It means also an increased tendency toward a public demand that the policy of the Federal Government shall be so changed as to declare, or to act upon the assumption, that the competitive system is infeasible for one industry after another; and so as to cause the Federal Government to assume the burden of determining and policing what should be regarded as "fair prices."

This is a comparatively new tendency. The theory of our institutions hitherto has been that the protection to the public against high prices has been price competition and not official supervision over prices, production, and the right to engage in industry.

Whether such new trend is compatible with our present form of government is a question too large for present consideration. But the existence and importance of this trend, I believe, is absolutely undeniable.

The basing-point system is nothing more nor less than a subsidy which has been seized by many industries, whereby they have raised their prices above the levels which would exist under price competition. It exists in defiance of the competitive system.

It means that such industries, particularly agriculture, as are not able to seize corresponding subsidies, and that labor and the clerical classes, must sell their products or services on a competitive market, while they must buy much of what they need under conditions of price control; or they in turn must be subsidized to sustain their standards of living.

¹ *Hardwood Lumber Case*. See testimony, *supra*, p. 1871.

Such subsidies through the basing-point system and other price-fixing devices, on the one hand, seized by industry, and any subsidies necessitated in favor of agriculture, labor, and the unemployed, on the other hand, all obviously must be deemed to exist at the expense of ultimate consumers as a class. The ability of consumers to buy manufactured goods is impaired in turn, to the loss of producers. Thus the circle becomes complete.

In the last analysis, the manufacturers may find that they have been trying to "lift themselves by their boot straps," and that they have not prospered because the consumer and taxpayer as classes have been crippled.

Manufacturers cannot long continue to produce more than can be sold. When their warehouses and yards are filled to overflowing and the demand drops off, they discontinue production and turn their employees over to relief.

The ability of the manufacturer to produce and the ability of the consumer to purchase are correlatives; each measures and limits the other. It is only through the prosperity of both that either can prosper. The pricing systems in steel and other commodities are among the chief factors in the crippling of consumers as a class primarily, and taxpayers and producers secondarily.

I am grateful to the committee.

(Whereupon, at 3:55 p. m., a recess was taken until Tuesday, March 7, 1939, at 10 a. m.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

TUESDAY, MARCH 7, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:15 a. m., pursuant to adjournment, on Monday, March 6, 1930, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senator O'Mahoney (chairman); Representatives Sumners (vice chairman) and Reece; Messrs. Davis; Ferguson; O'Connell; Berge; Frank; Hinrichs; Ernest Tupper, representing Department of Commerce; and Henderson.

Present also: Federal Trade Commissioners William A. Ayres and Charles H. March; Willis J. Ballinger, director of studies and economic adviser to the Federal Trade Commission; and William T. Kelley, Chief Counsel, Federal Trade Commission.

The CHAIRMAN. The committee will come to order. Mr. Ballinger, are you ready to proceed?

Mr. BALLINGER. Yes, sir. Before Dr. Fetter takes the stand, Senator, Mr. Burr has a motion he would like to offer to you.

Mr. BURR. I should like to move the committee for permission to offer the exhibits that are really a part of the steel-sheet-piling report that you received yesterday. These are the supporting exhibits. They have never been printed, but we have gotten up a copy of these exhibits for the purpose of this committee.

The CHAIRMAN. You want to offer them for the files?

Mr. BURR. Yes; if you please.

The CHAIRMAN. They may be accepted for filing.

(The volume of exhibits referred to was marked "Exhibit No. 350" and is on file with the committee.)

Mr. BALLINGER. Now, Senator, Dr. Fetter will explain the basing-point system to the committee, technically.

The CHAIRMAN. Professor Fetter, we are very glad indeed to have you present to explain it to us.

Professor FETTER. It is a subject, Senator, that evidently needs much explaining.

The CHAIRMAN. I confess it needs explaining to me.

Professor FETTER. I think that no one is confident enough to say that he understands everything about it.

TESTIMONY OF PROF. FRANK A. FETTER, PRINCETON, N. J.—

Resumed

Professor FETTER. There has been a vain effort on the part of public purchasing agents, Federal, State, and municipal, for a number of years to get competitive sealed bids as required by the law, because all they received were identical delivered quotations.

In the *Addystone Pipe case*, decided on appeal by the Supreme Court unanimously, it was declared that the effort of public officials to get competitive bids was defeated by the practice of collusion by the bidders, and that this constituted a fraud which violated the whole proceeding.

It is largely this aspect of the question which has forced this subject into the public discussion of recent years. The individual private purchaser is unorganized and helpless, but the Government, which of recent years in its various branches has been purchasing something like 50 percent of a number of the fundamental basic materials, is organized and can speak on behalf of the public. That is what has largely forced this subject before our attention.

I would like to say a word regarding the spirit of this discussion. It is worth while to indicate that spirit in order to prevent any possible misapprehension as to our purpose in discussing basing-point practice.

I approach the subject, and I trust that all of us speaking on behalf of the public approach the subject, not in a crusading spirit. I have no special concern either for or against any particular industry, as those have whose profits and personal success are largely bound up with some one business and with certain business practices, or at least they think that that is the case.

The basing-point practice has become a burning issue in the last 20 years, strongly opposed and, on the other hand, vehemently defended, because there are large practical private and social interests at stake. The basing-point practice began gropingly in one or two industries with reference to one or two products at first, and then it spread slowly, very slowly for a time, from one industry to another, but finally with accelerating speed it has spread throughout a large portion of the fundamental industries of heavy materials, basic crude materials, that are used in manufacturing.

Now, the basing-point practice is a very large part—not the whole, but a very large part—undoubtedly, of the large problem that engages the attention of this committee and unless some conclusions are reached regarding it and some solution of it, this committee will have largely failed. Our interest in the basing-point practice is not in the steel industry as such, or in any other industry, so to speak, as such. To the student of economics they are just so much laboratory material; they are tadpoles and pollywogs—begging the pardon of these giant industries—but it is in that spirit that we are considering them, as a part of the whole set-up of American business and as laboratory material.

I personally, if I may make this slight autobiographical allusion, have been accused of being hostile to particular industries. A good friend of mine who was a director of one of the big basing-point

industries said to me jokingly one day, "Do you know what your name is in our industry?" I told him I did not know that I had any name. He said, "You are known as the 'devil' of this industry," and he smiled, and I said, "Of course that is because solely of my attitude on the basing point." "Yes," he said; "that is all." He understood very well.

My interest as an economist was aroused a third of a century ago when I began to realize that something was happening to prices, to markets, and to competition, that was not laid down in the textbooks; that the economists had not been reckoning with it. The theoretical picture of the ideal markets which we force our unwilling students to study was evidently less and less fully realized as the years went on. It was no longer a true reflection of the American scene. These changes had happened and were happening almost entirely within the lifetime of men here present. The world of commerce that many of us knew as boys was very different from that which students and teachers of economics or Members of Congress are still thinking about.

The textbooks and the teachers of elementary economics still talk more or less in the old phrases—or did up to a few years ago—and a good many of them do not yet realize what has been happening. A striking and significant fact is that probably no general textbook used by the tens of thousands of American students now studying economics ever mentioned such a thing as an identical delivered price before the great war, and I question whether many of them, if any, even mention them now.

The picture of a market that was drawn was the market of the nineteenth century, at the point where competition probably reached its height and from which point it has been almost steadily retreating, as I tried to describe the other day. It was a picture of a local market, a locality where sellers and numerous buyers—numerous sellers and numerous buyers—were congregated to exchange goods. It was a place where they freely assembled, where there was common knowledge and information, so largely emphasized not long ago by the Supreme Court, rightly, as a necessary condition for free competition. It was a freightless market. The buyer came for his goods and took them away, where and how he pleased, and that is a most essential thing. The discussions of competition and markets in the nineteenth century textbooks do not even dream of the freight element or of the quotation being made on a delivered price.

In numerous industries this now has ceased to be the case. The markets are closed to buyers, in the sense that they are not allowed to come and assemble and compare with each other and see whether they are getting equal treatment. The basing-point practice has been followed in a number of leading industries for periods ranging, let us say, from 20 to 40 years, even more in certain exceptional cases. Most corporation officers in these industries, men in middle life, hardly know of any other method of sale, and that is an important psychological fact entering into this problem.

They have no experience with competition of the old type, the sale at the place of production where numerous buyers and sellers are congregated. They cannot conceive, because it is outside of their

experience, of such a situation, and for certain reasons that I will further discuss they can see only disaster in changing from the present conditions. (Representative Reece assumed the chair.)

I have had many and pleasant personal contacts with a number of these men, and I do not impugn their motives nor do I doubt their sincerity. There are reasons for their attitude, and you and I and others, if we were put in their position, would look at it as they do, but that is not my position and, gentlemen, that is not your position when you come to consider this problem and its possible solution.

There is some justification for their attitude. The present methods, known as the basing-point practice and identical delivered prices, were adopted as a means of escape from a chaos of discrimination to which they look back with a certain terror. There is a tradition of the reign of terror of this cutthroat competition which preceded the basing-point practice. They take, it is true, in my judgment a short-time view. They fail to realize the price that is being paid, the disadvantages of this solution which they have arrived at, but they have got into an impasse, an uneconomic practice from which individually and separately they are unable to extricate themselves. In the long run legitimate business as well as the whole public can profit only by sound economic practices.

So what I shall try to present to you this morning is a diagnosis rather than a prescription for a cure. You have to write that prescription, but if I am helping at the bedside of the patient, it is as a consultant to try to give you my honest impression of what the trouble really is, because until we properly diagnose a disease, we are not likely by mere hit or miss to find the proper remedy.

It seems to me that perhaps the first thing we should do is to try to see how the sale of goods at identical delivered prices came about according to the basing-point formula and how it differs from the ordinary methods of competition which we consider normal, the norm, at any rate the ideal which was presented in the textbooks by the economists. I shall not undertake to give a history of the development of the steel industry, and yet, because of the dominant place which the steel industry has had in the development of the basing-point practice, it is certainly very helpful to have some of the principal facts, the outstanding facts in that development, in mind.

HISTORY OF THE BASING-POINT PRACTICE IN INDUSTRY

Professor FETTER. The basing-point practice in America; I think it is generally agreed, began in the steel industry. It was under the influence apparently of Andrew Carnegie that the practice began sometime before the great merger in 1901. It was possibly—and this is rather speculative—copied from Germany where there were traces of it in the cartel system probably as early as 1870, and Andrew Carnegie, who was always looking for good ideas, found this, it seemed to him, helpful in entrenching his power as a steel baron.

The first authentic evidence of its use in the United States that is revealed in the proceedings of the *Pittsburgh Plus case*, which is our main source book now for the earlier history of this practice, seems to have been about 1880, a little earlier date I think than any mentioned by Mr. Burr yesterday. The testimony of an old steel employee, then retired, named Colonel Bope, told how the rule of sale

for all steel products had been up to 1880, he said, f. o. b. mill. Then in 1880 the practice was begun on a single type of product, namely, beams, and these seem to have been manufactured in only four mills in the country. The Carnegie mill at Pittsburgh was the farthest west and the largest of them all. The other three mills, the Phoenix in Pennsylvania, the Passaic Rolling Mills of New Jersey, and the New Jersey Steel & Iron Co., entered upon the arrangements that are essentially the same as the basing-point practice; that is, Pittsburgh was taken as the basing point and all these other mills, according to Colonel Bope, then matched that delivered price, which gave them of course a very, very attractive and a very, very alluring phantom freight in all the shipments in the neighborhood of their mills.

There was then a single basing point at Pittsburgh, but there was no considerable extension of the basing-point practice until after 1901, which was the date of the formation of the United States Steel Corporation.

(The Chairman, Senator O'Mahoney, resumed the Chair.)

There was some undoubtedly, but the whole subject is more or less involved in confusion and fog and probably never will be entirely cleared up. It is doubtful whether the historical data can be discovered.

The development after 1901 was dominated by the United States Steel Corporation. It was the view of the minority of the Supreme Court that price control was the very purpose of the formation of the steel corporation, that is, in the decision of the dissolution suit, and not economy of production; whereas, the majority of the judges, both in the circuit court below and in the Supreme Court, were wavering, thinking that perhaps, some of them, that it was the purpose and intention, but that the intention could not be carried out, as Justice McKenna said.

The formation of the United States Steel Corporation has been called, as Mr. Burr quoted the term, a merger of mergers. That is a very significant fact, because, during the nineties there was a large merger movement which went on during those 10 years, which effected the merger of various lines of production, that is, tubes, beams, hoops, and so forth, some five or six different important lines that we shall mention in a moment in connection with the merger. This was a period of mergers in the nineties, particularly of single lines of industry, horizontal mergers of like plants, which laid the foundation then for the great merger by the holding-company device of the United States Steel Corporation. This merger has been romantically described by a contemporary writer by comparing it to an assembly of the fleets of the earth. He uses the term "fleet" to express the separate big subsidiaries, the term "squadron" to indicate a group of mills under one of these subsidiaries, and the term "vessels" to apply to the separate plants. The account is very spectacular, but I have been unable to total his figures exactly, but there were at the beginning eight powerful corporations very quickly added to it, that is, eight fleets, as he called them. The Carnegie Co. under Andrew Carnegie and the Federal Steel under Gary were of course the two leading ones, and to those were added these other mergers that had been largely formed in the preceding 10 years:

American Steel & Wire, American Tin Plate, National Tube, National Steel, the American Steel Hoop, and then almost immediately

the American Bridge, Shelby Steel Tube, and then the Rockefeller plants. The American Tin Plate, for example, alone had what this writer calls 38 squadrons—that is, 38 groups—a total of 278 vessels—that is, 278 separate plants, production plants of various kinds. The total that this writer gives was 213 groups under the 8 principal fleets, 213 squadrons or groups, and then in the course of years there were added, besides those that I mentioned, American Bridge, Shelby Steel Tube, Union Steel, Clairton Steel, Tennessee Coal & Iron, the most notable perhaps in 1907, and so on with several other rather minor ones which we need not list.

I trust that the history of these mergers will be more fully recorded and studies of this committee continued in a year or two, and they should include a study of the Lackawanna-Bethlehem merger, the Republic Steel, Youngstown, and a number of the other great corporations.

With the formation, then, of the United States Steel in 1901, the basing-point practice rapidly developed under its leadership, and there is pretty good reason to think that that was perhaps the essential purpose, I mean it was to establish price control, and that was the method of price control on which they experimented and in which they had confidence.

This is very well presented in a brief by the Associated States in the Pittsburgh Plus proceedings in which it is told that in January 1901 light sheets were put under the basing point (that was a few months before the merger was complete), in April of that year, steel bars, in January 1902 wire nails and wire, and so on from 1901 to 1904 was the period of experiment with the zone system, where identical delivered prices were quoted in the same manner, but not varying from station to station by the actual rail freight, but varying by arbitrary selected zones in which the variation for the freight element was approximately the average of the actual freight rates in that region. That proved to be unsatisfactory. Now, this period was a period of experiment; this whole period from 1880 to about 1910 was more or less a period of experiment.

The CHAIRMAN. You say, Professor, that that method proved to be unsatisfactory?

Professor FETTER. The zone method.

The CHAIRMAN. From whose point of view?

Professor FETTER. From the standpoint of the industry, because it made a very considerable difference. The only difference between the zone system and the all-rail freight system is that the all-rail freight method varies exactly to the penny according to the freight book from station to station, whereas the zone system is a sort of arbitrary set-up so that any zone system of pricing will be relatively a little higher at one edge and relatively a little lower at the other edge of the zone; consequently, when you come to a point like a State line or the Mississippi River, the difference in delivered price just across the river would be very considerable, and that breaks it up. They get discontent and they get evasion—I should say a very legitimate kind of evasion, because this is not a public law which they are evading; it is a device meant to catch them, and businessmen very legitimately try any plan of diverting shipments or reshipping across the river. So that is really the reason; the zone system has been tried in several

other industries and I think, to generalize, that it usually has terminated in this all-rail freight which can be so easily administered by the official freight book. It doesn't make any difference whether the freight book is right, that isn't essential; it may not give the true rate, as long as everybody sticks to the freight book they are all right.

So through the Gary dinners, which perhaps have been unduly emphasized as an agency for educating the industry to this practice from 1907 to 1911, the Pittsburgh plus practice became pretty thoroughly entrenched before the outbreak of the war, before our entrance into it in 1917. It was then modified in part by the War Industries Board from September 1917 to June 1918—in part, I say, by making Chicago a basing point and changing somewhat the relative prices in various districts. That is a detail which would be very confusing and is not essential.

It was changed back in June before the armistice, some months on motion of a representative of the industry, and the rapid increase of freight rates which occurred rather tardily at the close of the war, as you all know, brought a most unexpected increase in the burden of this phantom freight upon fabricators in and around Chicago. The freight rate was increased from Pittsburgh to Chicago by successive stages from \$3.60 a ton to I think \$5.80 and then \$6.80, and then \$7.20, and then I think by the time of the Pittsburgh plus proceedings, if I remember rightly, it had again fallen to \$6.80, but it was then twice as high as it had been only a few years before.

Well, of course, that very greatly increased—it broke the backs, in a sense, of the fabricators in the West, the disadvantage at which it put them in the purchase of their raw materials; it was what finally drove them into a rebellion, so to speak, and lead them to bring this complaint. It is a curious fact that some of the very men—and I am speaking of individual men in the corporations, Senator—who were active in bringing this complaint had testified in the dissolution suit in favor of the corporation that it was a highly benevolent organization, that treated them entirely fairly.

I talked with one of them about it out in Illinois and, if I may use the phrase, kidded him a little about this, and he said, "Well, they had always treated us all right and we knew that was not good practice for us, but we could stand it; we did not want to kick up a fuss. But when they came to double that freight," he said, "it broke our backs." That is paraphrasing his general statement, and that is the way that a great many felt about it. The rule of the Steel Corporation, I think, to the fabricators is not a cruel rule; they are probably treated as fairly by that corporation as by any other that they could have any dealings with.

So the Pittsburgh plus complaint and decree was issued largely on the motion of people in the West, although, of course, the effect of the practice east of Pittsburgh was about equally oppressive, because New York City and all of the cities on the coast were paying phantom freight and the plus from Pittsburgh, which was the sole basing-point for most of the products. The defense that was put up at the beginning by the corporation against this complaint, which was brought against them only and not against the whole industry, was the very simple and very clear statement of what we call the supply-and-demand theory. It was based upon the elementary prin-

ciple of deficit in surplus areas. They said, "Chicago does not produce enough products; therefore it is a deficit area. Pittsburgh produces more than enough to supply its own needs; it is a surplus area. And on sound principles," they said, "of demand and supply Chicago should get a price equal to the Pittsburgh price, plus the freight."

Now the joker in that, which was easily exposed, was that this deficit, so-called, at Chicago was artificially created. If you have a surplus area, a surplus region, and a deficit region, the deficit region, on sound economic principles, does not proceed to increase its deficit by shipping back into the surplus region. There was the joker. Here was a method of mutual dumping, and the increase of products at Chicago and at Gary had become so great that it was shipping eastward a considerable part of its product instead of supplying the local market, whereas at the same time Pittsburgh was shipping into the local market. It was not a deficit area in the true sense of the term at all; it was a counter-deficit area, and the Commission, with these facts before it, and with all the careful analysis, so decided, and rightly.

It was a fake application of the principle of supply and demand, and it is interesting to note that so far as I know, no basing-point industry now is basing its defense upon this, which was the main pillar of the defense of the Steel Corporation in the *Pittsburgh Plus case*. The counterfeit character, in other words, of that deficit conception has been pretty thoroughly exposed. Now the recent changes that were made within the past year have carried still further the change from a single-basing-point plan to a multiple-basing-point plan. It is well to observe, to think exactly on this subject, that there never was a complete single-basing-point plan in steel, even at the time of the *Pittsburgh Plus case*; there was a basing-point at Birmingham, with a differential in the base price between there and Pittsburgh, but Pittsburgh was not the sole basing-point and there had been various times, as I mentioned—

Mr. FERGUSON. Would that apply to all steel products?

Professor FETTER. To all those that were manufactured at Birmingham, that is my understanding, and of course during the war, the period of 1917 and 1918, there was a basing point at Chicago and at some other points, some minor changes of that sort, and when this order was accepted by the corporation in 1924 with a statement that so far as practicable they would carry it into effect, they proceeded to make a basing-point at Chicago with a differential still of \$2 so that we have always had the essential features of a multiple basing point in steel, but it has had fewer basing points for a continental Nation like this than any other industry, with perhaps some very minor exceptions, small products.

Now, I come to what I suppose is my essential job, a discussion of the elementary principles of competition and market prices as related to basing-points and I beg your indulgence because this basing-point practice is certainly a most ingenious invention. It provides a formula so simple that anyone in the sixth grade who knows addition and subtraction can apply it, and yet it presents complications which will puzzle the wisest members of Congress.

The many questions that arise, that possibly will be put to me here today, some of which I fear I will not be able to answer, are varia-

tions of this practice, are attempts to understand the variations of this practice. Now, I have already referred to certain confusion in using the old terms and conceptions of markets and attempting to apply them to quite different conditions that have arisen. A very excellent example, that is rather tragic in its way, was presented in the case of the *Trade Association cases*, decided in March 1925—celebrated leading cases. There was economic testimony given there by an economist, a friend of mine, and in other fields a very competent economist, who misled the Court, I am convinced, perhaps innocently on his part—to be as charitable as I can about it—by using the phrases with reference to uniform market prices in a manner that led the Court to believe that he was referring to these identical delivered prices. At any rate, they took it that way. He did not—I have very carefully examined and reread that testimony—in any place say that these uniform market prices that he was discussing, and for which he quoted 17 leading authorities, he said, of whom I happen to be one, according to him—he did not once say that the uniform market price that these economists were talking about was the same thing as the identical delivered prices that happened to come up in that case; but the Court evidently so took it, emphasized the importance of this mass, they said, of economic testimony, of leading economic authorities, and were undoubtedly influenced very greatly.

In my judgment, the result was an unfortunate miscarriage of justice, not due to any corruption or to lack of intelligence on the part of the court but to a misunderstanding of the sort to which I referred in my very opening remarks. Now, I have attempted to present here—I do not know whether this is too far away; maybe I can bring this chart up a little nearer. Congressman Sumners has objected to this excess use of charts, but I may say in justification that these are not statistical charts which represent graphically masses of facts; they are schematic charts. In other words, they are an attempt to picture ideas; ideas are very hard to picture—they are very hard to get. But it is in that sense they are more or less symbolic. Now, I spoke of how the conception of a uniform market price set is found in the textbooks. Can you see that far?

The CHAIRMAN. Yes; it is visible here. Won't you identify the chart?

Professor FETTER. This is Chart A, entitled "Intermarket Competition, With Uniform Market Prices." And this, I submit, is what economists are talking about in the textbooks.

(The chart was marked "Exhibit No. 351" and is included in the appendix on p. 2186.)

Professor FETTER. We have in these little circles a representation of a number of independent shops and producers at a given location, and this is a, so to speak, freightless market; they are near to each other. The sale of the goods occurs there [indicating spot marked "B" on the chart]; the delivery occurs there. There is no thought of a delivered price or of the freight at all. What happens is that the prospective buyers from all directions come to this market and in the normal conditions which prevailed up to 100 years ago, before the days of railroads, they did supply their own transportation. The idea of a delivered price, a quotation of a delivered price was just practically out of consideration before the invention of the railroads.

It was 50 years after the railroads before the practice of quoting delivered prices came in in a small degree.

MR. FRANK. This is a picture of a railroadless world?

PROFESSOR FETTER. Yes; it is really—of a nontransporting price. A freightless market, in other words. And so you would have here a uniform market price resulting from competition. That is the axiom and that is the fundamental principle laid down, and I need not go at great length into that. Every elementary student of economics knows that. Under conditions assumed, I think that probably no one would dispute it; they are there together, and the fundamental uniformity, I believe, of that is a uniformity in the treatment of one's own customers by the seller. It is a market in the sense that numerous buyers are there; they are watching each other; they overhear each other; and consequently the fundamental uniformity is a uniformity in the treatment of one's own customers, of the customers of each seller.

Now there follows from that a secondary uniformity, namely a uniformity in the prices that the different sellers are charging, but I believe this to be less fundamental for the reason that if any one of the sellers thinks that price is too low he temporarily withdraws from the market. He simply continues to quote a somewhat higher price, expecting that the conditions of the market a little later will bring a higher price.

Therefore, for the time being, he has a reserve valuation that is a little higher than the market price, the going market price, and if he has figured it right the others have sold out at a little lower price and then his stock will sell at the higher price. So we can say there is uniformity in a general sense, a tendency toward uniformity, both as between the buyers and as between the prices quoted and received by the sellers, but the second uniformity is a somewhat less accurate one than the other. So we have laid down practically the test of a true market by the economists, a price uniformity there. That has no reference whatever to a delivered price, nor is it a uniformity in the price quoted at places outside of the market. A market in that sense, clear from the Middle Ages, was a locality, a place where people assembled. There was connected with that, of course, always the thought that the influence of this market extended outward to the distance of the customers that could be attracted to it.

We are familiar with the contrast between interstate and intrastate commerce, and paralleling that terminology (which I think is not confusing now) we can think of the difference between intramarket competition, the old type of competition, and intermarket competition, because with the existence of any two local markets where there is real competition among the dealers there always is also in the background a certain amount of intermarket competition. If the market price established here is higher than the market price there, then when people have their own means of transportation they will travel a little farther to this market. In other words, that is a very simple elementary principle of choice, a principle of indifference of the individual for an equilibrium to be found between these two. It is quite possible for this intramarket competition here at A, we will say, to result in a price higher or lower than the intramarket

competition at some more or less neighboring market B. But these two market prices will be competing, are competing practically, always have been, in the intermediate zone. This zone is what we will call the geographical margin of competition, and in any set-up in a country where competition of the old type prevails in a very high degree, you have these two not in conflict with each other but necessarily adjusting themselves to each other.

See what would happen if the conditions of production and supply are more favorable, let us say, in A than in B, so that while the true competitive market price in B is \$1, the true competitive market price in A, without collusion at all on the part of any merchants in either market, would become 80 cents instead of \$1. Then the amount that is saved in the price of goods can be spent on freight, and you will find a shift in the geographical margin between those two competitive markets. That can be easily calculated by adding the two base prices, adding the complete freight between them and dividing by two. As indicated here, A, with a 35-cent price paid in freight, has a total delivered cost of \$1.15, and with 15 cents freight added to \$1, B, has a total delivered cost at this median point of \$1.15. In other words, there would be a point here of equilibrium and all the buyers on this side would be attracted toward this market, assuming homogeneous products, and all the buyers on the other side of that line to that market. There is necessarily no crossing; it is unthinkable that there would be cross shipment excepting as some other considerations would come in; a man might have relatives in one market and would be willing to travel a little farther, he may be going there anyhow on other business, it is the county seat and he has to go there on account of a lawsuit, etc. There would be hundreds of things that might lead them across, but the pure economic consideration, the price of the goods, the price of the freight, would give a definite dividing line there.

That is the type of geographical competition which always has been considered, until very recently, to be normal. The idea that the base price, that is, the market price, in any competitive market will permit the producers in that market to sell everywhere over the landscape would just seem to be an utter absurdity to the economists of that day, and it is only in the last quarter of a century or so that that idea resulting from the basing-point practice has come, that you must have shipment in all directions.

This whole chart A refers to the competition with uniform market prices without discrimination, because uniform price is merely a synonym for a nondiscriminatory price.

Mr. HINRICHs. Is this a convenient time to ask Mr. Fetter a question with reference to chart A, or would you prefer that I wait until he has gone further in this discussion?

Professor FETTER. I think possibly that it would be better if we went a little further; I may touch upon those points. Of course that picture there conceives of an independent relationship of all the different sellers in the intramarket competition; it also conceives of an independence between the markets, there is no collusion between these markets, they simply can meet each other and get customers if they can make it practical. That is really the normal type which still

prevails, I am sure, gentlemen, in a great many lines of business. It is the one price system in retail merchandising which has replaced largely the chaffering, the higgling, which there was once.

Corresponding with this chart A which shows the difference in the market prices of the two competing markets, I have here a bird's-eye view (chart D) of the same thing. This picture on chart A is what you call the architect's elevation, showing the relationship at one point along one line between the two.¹

The CHAIRMAN. This is the view of an imaginary bird poised above the imaginary median point of the lower part of chart A, I take it.

Professor FETTER. I see the Senator is getting into the spirit of this thing.

It is the simple principle that what a buyer can save by getting a lower price he can afford to spend on freight.

It happens that as the area within which the one market can attract from the other is narrowed, the area of the one with the relatively lower price is enlarged, so as the relative prices of those two under the competitive conditions rose or fell, the area would be pushed back or forth not as a straight line, but as a succession of curves, hyperbolic curves, if that means anything. It is simply a line traced by points with a common difference from two foci.

That indicates the motive that there is in competition between markets, even on a completely competitive basis, and intramarket competition here would have the motive always, I mean the merchant's intramarket competition, of lowering their prices, to draw in customers from the greater distance, and undoubtedly that does so operate.

This is just a little fragment of the same chart, a bird's-eye view of intramarket competition where you would have three or more markets competing, and the relative market prices of those three markets would determine the amount of area from which they would be able to attract buyers.²

Of course, I need hardly say that where we are dealing with centripetal markets, that is produce markets that are gathering from widely separated small producers like farms to a single buying center, like Chicago, the wheat pit, that there this is true with a difference. Other things equal, you have to diversify your thoughts somewhat to get—

Mr. FERGUSON (interposing). Dr. Fetter, on the second chart (referring to "Exhibit No. 352"), the one you spoke of on the bird's-eye view, shouldn't that be introduced into the record?

Professor FETTER. Yes. I will then introduce these two—chart D and chart E.

The CHAIRMAN. Which is which?

Professor FETTER. The chart D was this one showing the ground plan.

The CHAIRMAN. Please identify it so that it will be clear in the record.

Professor FETTER. It is called "Market Areas Determined by Competitive Price Differentials."

The CHAIRMAN. That is the second chart to which you referred?

¹ Referring to "Exhibit No. 352," appendix, p. 2187.

² Ibid.

Professor FETTER. Yes; and chart E is called "Mutual Exclusion of Three Competing Markets."

Of course, this is the most elementary conception of the thing.

Mr. DAVIS. Dr. Fetter, if you are through with those, just hand them to the reporter.

Professor FETTER. I think they have been sufficiently photographed upon your retina, and I can refer to them without having them up there.

(The charts referred to were marked "Exhibits Nos. 352 and 353," respectively, and are included in the appendix on pp. 2187-2188.)

Professor FETTER. Right at this point I would like to refer to some testimony of Judge Elbert Gary in the United States Steel Corporation dissolution suit, if I may read this brief extract. He was questioned by Mr. Lindabury:¹

In the latter part of the year 1907 you acquired the properties of the Tennessee Coal & Iron Co. I wish you would explain what led to that acquisition, beginning at the beginning and stating the circumstances in your own way.

Answer. In my previous answer I did not refer to the Tennessee ores at all. I do not consider they come into competition really with the northwestern ores, the Minnesota and Lake Superior ores.

Question. You might as well, now that you have alluded to that, state why not.

Answer. Because the markets are different. The Tennessee Coal & Iron plant supplies a certain market within a certain territory. The territory is large in extent but limited in demand for the products. At some time we hope and expect that to be a very great market. It may be a long time in the future. The freight rates determine largely the market for any given product and the question of territory of any particular market is susceptible of mathematical demonstration by reason of the freight rates. The products of the Tennessee Coal & Iron cannot successfully compete with the other markets, the northern markets. They never have and never will possibly successfully compete with them. It is true a man can send anything from any place to any other place and put it in competition at that last-named place, but that is not competition that is worth considering for a moment. It is not practical competition. It might be a destructive competition. A manufacturer might sell at a loss a given commodity in a limited quantity at a remote market for the purpose of driving someone engaged in business at that market out of business, but I do not consider that ordinary, natural competition.

Question. It is not economic competition?

Answer. It is not economic competition, quite the contrary.

Judge Gary was no mean economist when he wanted to be, and in this case, as in so many, I find myself so nearly in complete agreement with what the big-business man says that I begin to doubt my sanity, but my confidence is restored by the fact that almost the next moment he will say something exactly contrary and I know then I must be right. Very soon afterward in the *Pittsburgh Plus case* he presented a very different conception of the subject. His words almost perfectly—I might quibble with a little phrase or two—express this notion that if you really had two competitive markets they would not sell all over the landscape. They can't, if they are really competing.

The result of these conditions of intermarket competition are obvious, several important ones. There is no cross-shipment of homogeneous goods ("Exhibit No. 353"), referring to that; there is a geographical margin between the areas that are controlled by these different markets. The principle of indifference to the buyer operates at a certain line or at a zone. That zone is not just merely a knife blade

¹ From transcript of record, Dissolution Suit, Volume 12, pp. 4833-4834.

but there is a certain range there, varying with the motives of individuals, their opportunities for shipment or their preferences for personal relations, and so forth, but a considerable margin there. There is no dumping, to use the phrase that we are all familiar with in foreign trade. Dumping means simply the selling over in the other territory at a price that nets less than the price obtained from those nearby. Those who have made a special study of dumping in foreign trade, I think, are unanimous in the opinion that dumping can take place only when there is monopoly at the point from which the dumping occurs, where there is monopolistic power, because otherwise the excess of supply at that point would be offered in the local market to that neighborhood and in that area with the result under conditions of supply and demand of bidding down the price in and near the mill.

In other words, there is more lost by dumping by an individual, but if he controls the whole supply, is able to control all of the supply in that neighborhood, he may sell a portion at a cut price and on the whole profit by it.

The advantage or profit to the individual monopolist selling by dumping cannot be questioned. We may question, of course, his influence on the public policy and his effect upon the buyers as a whole.

Here is a little supplementary diagram. I have called the chart a supplemental to indicate the very substantial effect that there is in a change in relative market price.

(The chart referred to was marked "Exhibit No. 354" and is included in the appendix on p. 2189.)

Professor FETTER. The areas of circles vary according to the square of diameters is a simple geometric principle with rather surprising results when we come to a change in the base price. We have indicated in chart A the change by which the price in A falls from a dollar to eighty. This area [indicating circle on right] is half of this area here of A. The area shown by B and the smaller circle here is the area, market area, that A would have when its base price—that is, A, the competitive market would have when its base price—is the same as the competitive base price of B. But if it can enlarge this by the amount shown in the other diagram by extending the 10 points of freight further, it would increase its area, market area, by 96 percent. A rather striking mathematical fact is that this area in here—

The CHAIRMAN (interposing). Between the two circles.

Professor FETTER. The outer zone that would be annexed, though it doesn't look so to the eye, is 96 percent of the area of the inner zone that was represented before the price change. You cannot calculate this effect on B very exactly because only one side of B is toward this market A. So the sales of mill increase as its price falls in comparison with all the surrounding mills. The result is a constant temptation to reduce its price because of this very large area which may be annexed.

Of course, it might be that that area had few customers in it or it might be one very rich in customers and very plentiful in customers and, of course, the motive would vary according to that. This might be an uninhabited region and then there would be little induce-

ment, or it might be a very important industrial and commercial region and then the motive would be far greater than that indicated by 96 percent. Those are practical conditions that would enter into it.

But on the side toward A, B would lose, possibly not all that is shown there, because it would depend on the relative position of other mills surrounding it, but by and large that represents the general schematic comparison—the schematic effect of a change of base prices.

Mr. HINRICHS. Professor Fetter, the point that you just mentioned about the density of that outer zone really needs to be strongly emphasized, doesn't it? That is, one of the characteristics of the market at the present time is that it is aggregated in large cities which are separated by substantial distances from one another. Therefore when an effort is made to extend the market you either annex a large gob or else you don't get anything. It doesn't come in as the economist visualizes the thing schematically in terms of little additions to the market but it is great gobs that you reach when you get out, or else you don't reach anything, which influences the reasoning as to its practical effect. I don't mean that it upsets the scheme that you have portrayed which you described very adequately; but you do need to emphasize very distinctly the discreet character of that area which you are annexing and that you get a lot or nothing.

Professor FETTER. I quite agree with the importance of recognizing that and I did mention it, but I think on the other hand that the point that you speak of has been greatly exaggerated. I mean it is as wrong to take one extreme of the statement as the other, and in all of the defenses of the basing-point, of which I know, publicity documents, they take the extreme of that; they assume there is only one place where the products of that mill can be sold, and that happens to be right there on the border, right over, just inside of the territory controlled by the other mill. There is need of keeping a very carefully balanced judgment of the thing, and in principle what you say is perfectly sound, that if this were the case, that the only place for which that mill was producing was located over there, then there would be a question as to whether it could and should reach that so-called market; that is, that consuming center, I should prefer to call it. You see, you are changing your terminology when you call that a market and move away from the point of production to that. At any rate, that producing center, and it can be reached either by lowering the base price or by making exceptional discriminatory prices just for that neighborhood.

Mr. DAVIS. Doctor, isn't it true that a company might be able to successfully compete in a portion of that added area, but not in all of it, because of the closer proximity of some competitor to one side, we will say, of that wider circle?

Professor FETTER. Yes; it is a question of what policy should be pursued and what I have tried to bring out here is that, if you have completely competitive centers, that they have no choice; all they can do is to reach that outside area by reducing their base price; that is, by reducing the market price. They have no choice, but I come right here to that next point of where there is a choice.

Now, in chart B I have tried to picture the idea that we must take when this old competitive system of markets began to break up.

Now, as you recall this chart A (referring to "Exhibit No. 351"), supposing that market B—I am speaking of chart B here entitled "Monopolistic Versus Competitive Producers, Results of Discriminatory Prices"—or that all of the producers at market A ("Exhibit No. 355") should merge. There is no longer then intramarket competition at that point. There is only one producer and one seller. Therefore, the intramarket competition disappears at one of these points but it continues at the other.

(Chart B referred to was marked "Exhibit No. 355" and is included in the appendix on p. 2189.)

Professor FETTER. Now that is what began to happen in this country in a number of industries along after the Civil War, and it introduces a tremendously disturbing factor; it exposes the competitive market [pointing to circle on chart B] where smaller factories still continue, and there is something like real competition in a real market price; it exposes them to the sort of raiding which our domestic producers suffer when a foreign monopoly dumps upon our territory. This procedure at A (on chart B), if completely merged, can become a nonbasing point. That is, there is no longer a market price, it is an administered price, and the corporation at that point has the right, if it is permitted, to simply cease to have any price. That is a non-basing-point mill or point of production.

Now what can it do? It can make this its basing-point and something very similar to that has happened in several different industries, and it can then collect phantom freight. There is where your phantom freight begins, as soon as you have a nonbasing point. It can charge the price here, plus the total amount of the freight [referring to line on lower section]. It is emancipated from any relation to its cost of production, you see, for the time being, and even a single mill that was a large single mill under modern methods of large production would be in that position, even if it did not result from a merger, but in many cases undoubtedly this situation of a single seller does result from merger. Now we have, or may have, the beginnings of the basing-point practice when this mill here (at A) chooses to quote not a uniform delivered price, a uniform market price or mill price, but to make its quotation (circle B, chart B) upon the other mill. Then its net realized prices begin, of course, to be adjusted in this way. They go down twice as fast as the delivered price as you move away from the non-basing-point mill. So that at this point where the delivered price is \$1.50 with this relationship of price, if the basing-point price is a dollar, the net realized price obtained by a monopoly mill here would be \$1. But if it continues to sell clear into this market (circle B in "Exhibit No. 355"), as is not an uncommon proceeding, its net realized price would be only 50 cents. Here it would be 50 percent more than the price realized [pointing to A on "Exhibit No. 351"] by sellers at B, but here if it sells to there, not an uncommon proceeding, its net realized price would be only half as much, would be 50 cents less than the net base price.

There I think it is well to recall a comment that I made when I appeared before the committee last week of the importance of considering monopoly and monopolistic power not as a percentage of

the national capacity of the industry but as essentially a local problem. You might have this mill here with strong financial backing, representing not more than 1 or 2 or 3 percent of the total producing capacity of the United States, and yet it would be able to behave in this manner, with relation to all the surrounding territory, and in some regions that would be for steel or cement or lumber or building materials, an area as large as the German Empire. Our country, you must always remember, is about 15 times as big as France, consequently we are playing with figures when we speak of the percentage of the national production, which may be located, concentrated in one comparatively small portion of the whole country. Now this is a kind of a dumping and discrimination on the part of the merged mills, the nonbasing point, which the competing mills are incapable of dealing with, because they cannot in turn dump unless they come together and that probably is a part of the explanation of the desperate necessities of the trade association, often the small producers.

I offer that only as a suggestion for further inquiry, but the centralized producers are at the mercy of the larger centralized and strongly financed competitors. Now in the case of Chart A¹ a uniform market price, without freight element calculated at all, gives uniform market price, without freight element calculated at all, gives a net realized price exactly uniform wherever the seller disposes of his goods, the net realized price is the same as the uniform market price. That, of course, is simply another way of saying that they all sold at the same price at the place and the buyer looked out for the freight himself, but at the same time it is well to think of that.

Now let this merger go on a little further, or to the point where you have two large single mills or producers.

The CHAIRMAN. Before you proceed to chart C, Professor Fetter, may I refer to B again? Do I understand you to say that under the condition which you have described, the merged producers at A adopt the price of the competitive producer B in the market B and add to that the freight? Is that the manner in which you describe their ability to take away the market of B?

Professor FETTER. I think I have left the wrong impression on that, Senator. What I would say is this, that the moment that you have a producer of capacity and financial strength at a considerable distance from any competitor, there you have monopoly power. The real question is how that monopoly power will be used. The mere fact itself that a mill is off there at a distance, 100 miles or 200 miles, 300 miles, from another producer of the same product, gives it a potential monopoly power. That is the sort of thing that Mr. Berle referred to in a statement he made some months ago, and I give a conditional assent to his view—but a conditional dissent, too.

He emphasized the fact that the local blacksmith of the old days, and the local general merchant in the village, was a monopolist. Well, I consider that an academic expression. The local merchant and the local blacksmith—

The CHAIRMAN (interposing). Well, you are just using different terms, that is all. He was conveying an idea different from that which you seek to convey by the same word, was he not?

¹ "Exhibit No. 351," appendix, p. 2186.

Professor FETTER. No; I do not know. I think where we differ probably is our notion of what really happens after that. I agree with him that the moment that you have any seller at a distance from any other seller, you have potential monopoly. That is that seller is in a potential monopoly position.

The CHAIRMAN. When you use the word "monopoly," now, are you using it in the sense that this distant producer has an exclusive market to which he alone may successfully go, or are you referring to a power which he has to fix prices to the disadvantage of other producers by using the so-called basing-point system?

Professor FETTER. Well, I think neither of those, quite. I am referring to a power which he has to charge higher prices to his neighbors than at a distance. That begins at once, as soon as you have any—

The CHAIRMAN (interposing). Of course, that is precisely what Berle's blacksmith could do?

Professor FETTER. Yes; but did he do it? My own memory goes pretty nearly back to those days in the West, and the farmers came in in their own wagons to the county seats and centers, and a blacksmith who was known to do that would have been pretty well boycotted, I think.

The CHAIRMAN. Well, would you not agree that even in those days, which I take it are not so long ago—

Professor FETTER (interposing). Which a young man like you and me would remember.

The CHAIRMAN (continuing). That the producers did not at that time charge "what the traffic would bear"?

Professor FETTER. I think the local merchants and the local blacksmiths did not. That is, not charging what the traffic—they did not charge what the traffic would bear in the sense of charging a different price for homogeneous products from all their different neighbors; they could not have done it. Public opinion would not stand for it.

Mr. FRANK. Professor Fetter, to shift from the rural to the urban centers, don't you concede there is such a thing as a special or location monopoly?

Professor FETTER. Yes; that is just the point I am talking of now.

Mr. FRANK. So there is such a thing. For instance, a merchant having a store at a strategic point in the congested center of a large city has certainly something resembling a monopoly advantage as compared with the merchant who owns a store on the periphery of the city.

Professor FETTER. Yes; but that will be shifted to land value.

Mr. FRANK. Indeed; but out of the fact that he is able to and does purchase land at that point, out of that fact grows a strategic advantage over those who have land at less desirable points?

Professor FETTER. Yes; but I would not consider that the value of land at different locations is essentially of a monopoly character; it is a scarcity. All value involves scarcity, and, of course, that does involve scarcity of advantageous location.

Mr. FRANK. That is, if you analyze the word "monopoly" and break it down in its components, the essential ingredient of a monopoly is the fact that you have an advantage over others; that you are in a comparatively sheltered position—you are sheltered from competition up to a point.

Professor FETTER. Yes.

Mr. FRANK. I think we would agree that seldom, if ever, is there a perfect monopoly.

Professor FETTER. Exactly.

Mr. FRANK. Because there is always the possibility of seeking substitutes if the prices goes too high. So that you have degrees of monopoly or degrees of monopolistic advantage, and there can be such a thing in that sense as a sheltering from competition to a degree and in that sense a monopoly growing out of the fact of location. Now, it may be that the blacksmith in the small town did not know the law of monopoly price or that public opinion would not let him apply it, but in the large city the merchant who has an unusually fortunate location, where people will come to him just because he is located there, is sheltered from the competition of a merchant 5 miles out on the periphery of the city.

Professor FETTER. I think I agree entirely, but the real question comes here, what is he going to do with that monopoly power? What is he going to do with it, and that is the question of public policy. What are we going to allow him to do with it?

Mr. FRANK. The point I wanted to bring out is that all through our economy, necessarily there are circumstances giving people varying degrees of shelter from competition, and a purely competitive condition, all through our industry, has seldom, if ever, existed.

Professor FETTER. I quite agree with you.

The CHAIRMAN. To return to what I was saying, Professor Fetter, when Berle's blacksmith charges more than the traffic will bear, then he invites competition and he can't prevent it from coming in because he doesn't have command of the devices which will prevent the competition from coming in. A monopoly which proceeds from a strategic position, as Commissioner Frank has just described, or which proceeds from a superior and more efficient manner of production or a particular brand of goods, is one thing against which no one complains. That is what may be termed a natural monopoly, and, of course, I realize that I am using that phrase not in the technical meaning in which it is usually applied. But our concern has to do not with these normal monopolies which have always existed until they began to charge more than the traffic would bear; our concern is with the manipulated monopoly which is the result not of normal factors but of abnormal and artificial factors which are interjected into the situation by reason of conspiracy or fraud or force or some device, and I take it that you are explaining to this committee today how it is that the so-called basing-point system can be used and has been used to lend false strength to certain producers and to enable those producers to achieve the artificial monopoly which results in maintaining prices and reducing production.

Professor FETTER. I think that is a perfectly fine statement of it, and I am in entire agreement with Commissioner Frank as to the pervasiveness of monopoly influences and factors all through. In fact, for 30 years before this recent rise of interest in competitive monopoly, which I think is a fine development of theory for the younger men, I have been preaching substantially the same doctrine. I lost my naive faith in the practical universality of this complete condition of competition which I described at the beginning.

Mr. FRANK. In other words, for adequate thinking on the subject of the nature of our economy or of virtually any economy, one ought to blend the rigid concepts of monopoly and competition. They shade off from one to the other, and the question is, in any given situation, looking at it from the point of view of policy, how much competition we want, how much monopoly we want. The elimination of all monopoly would end you up either in anarchy or communism, wouldn't it? To take away all monopoly would be to take away all private property in producers' goods. If you want to have a world in which there was complete competition and everybody started equal, you would have to take away all those privileges that go with property in producers' goods, and I don't know but that would be the point where anarchism and communism would meet—I don't know where that would be.

Professor FETTER. I think I will throw in my fortunes with the Senator's statement, for I think he made a distinction there. We are not going to deal with all cases of scarcity value wherever they exist. That is a part of the system of private property.

Mr. FRANK. Exactly.

Professor FETTER. But public policy comes in at that point where we see the individual trying to get more than natural scarcity, more than his natural ability will give him.

Mr. FRANK. That is, it is a question of what is socially desirable in any given instance and not a question of applying some a priori notion of an economic world moving as did what might be called the Newtonian economic world, which was conceived on a purely mechanical basis and without the interruption of any social habits or custom, the kind of world which the old economist tended to conceive.

Professor FETTER. In the extremist sense (and the extremist sense verges on nonsense I am inclined to say) a man has a monopoly of anything he owns. If your heart is set upon that little 20-cent knife there, I have a monopoly of that knife, but I don't believe that that is something on which you should pass a law.

The CHAIRMAN. To get back to the question which gave the impetus to this rather delightful discussion, let me call your attention to chart B. I was trying to get a more clear understanding of your explanation of the manner in which the producer at A uses this device to drive out of business the independent producer at B.

Professor FETTER. My thought was not that immediately on getting this power he would dump. He might behave in a quite different way. He might continue to keep his price there in somewhat relation to ordinary cost; he would be getting normal profits, and he would continue to have a basing-point mill there—this corporation would continue to have a basing-point mill there. All I wish to point out (and I think it is unescapable at this point) is that as soon as you have this economic situation here you do have a potential monopoly power on the part of this mill.

The CHAIRMAN. How do you illustrate the exercise of that power? That is what I understand to be the picture, this chart, this idea, which you have portrayed here, which I might call surrealist chart B.

Professor FETTER. This is what it can do. It can boost its price here, it can become a non-basing-point mill, because a non-basing-

point mill is nothing but a basing-point mill, if you want to think of it that way, that has put its basing-point price so high that it doesn't control any territory; it has priced itself out of the control of the territory, but it doesn't price itself out of the sales because by continuing to match the prices of some other mill, exactly match them, delivered prices all along the line, it still can continue to quote and bid just as well as it could before. It doesn't price itself out of the market by abandoning the basing-point price.

Mr. BALLINGER. At the monopoly point there the monopolist can charge a price equal to the competitive price in the distant market, plus the freight to that market, which allows him the phantom freight. That, in other words, gives him the sinews of war, extra profit, and using that extra profit he can then invade the competitive market on the basis of dumping and eventually destroy it.

Professor FETTER. Yes; or he might use the extra profits that he got in selling in this market by raiding with cutthroat prices in some other direction up here. If the heart of this combine is set upon acquiring some mill out in the other direction, it now has sinews of war in the way of prices, and it can cut its prices out there. Give it the power of local discrimination and you have given it a dagger.

Mr. HINRICHS. I want to come back for just a moment to that question of the local monopolies that prevail within a market which on a national basis would be regarded as generally competitive. You spoke of them as normal or natural, almost inevitable monopolies growing out of position, and yet you said that it was very important as to the manner in which that monopoly power was exercised. There were several characteristics of that kind of local monopoly, weren't there, that need to be remembered? Wasn't the fundamental concept that was holding people in line there in the exercise of monopoly power, among other things, a survival of the concept of a just price, of a reasonable return for labor? Your answer to that was "yes"?

Professor FETTER. Yes, partly. I would like to explain it further.

Mr. HINRICHS. Then in the second place, the part that capital investment played in the man's determination of what was a just price was, under the technological conditions of those times of small scale production, relatively less important than it has since become.

Professor FETTER. Yes.

Mr. HINRICHS. So that you had as a third characteristic a situation in which relatively few individuals were employed as wage earners. In arriving at a concept of a reasonable price a man was thinking in terms of the return to his own personal labor, and he was not in a position to arrive at lower costs through the lowering of the returns to other people whom he employed. It seems to me that those three characteristics of that situation of local monopoly, when you thought of the monopoly as natural and of the monopolist as good, are characteristics which we are going to need to remember when I come to some of the questions that I would like to ask in connection with chart A. I just wanted to get that point settled at this time. I will withhold the other questions, if I may, until later.

Does Professor Fetter want to answer what I was saying?

The CHAIRMAN. Do you care to make any comment upon Mr. Hinrichs' interpretation?

Professor FETTER. I think merely this, that undoubtedly these technological changes have gone on and are a part of the problem of the large production and of the isolated producer and of the dwindling number of sellers. That really comes to the heart of the problem. We have pursued the spiral. The Middle Ages in which just price was a leading concept was a period of scarcity when there were very few producers. It originated when the population of England was about 2,500,000. Even the small shopkeeper was isolated. Therefore, there developed there a concept of the common law which seemed to be completely outdated by the beginning of the nineteenth century. Therefore, there was a repeal of a great number of the old statutes and a change of the common law at that time with reference to common occupations. Now, through technological change and large production we are back very much on the same problem of fewness of sellers, and that raises the very serious question and the very fundamental question for this committee to decide as to whether we do not need legislation which recognizes the scarcity of sellers and the lack of competition.

Mr. FRANK. Would you say, Professor Fetter, that the common law, at the time when the manorial system was beginning to break down—with the rise of the common person engaged in a common calling—recognized the problem, in part by statute and in part by judicial decisions, and imposed obligations in the interest of the consumer; and that as competition increased those obligations went into desuetude because the pressure of competition protected the consumer? Might it, therefore, be argued that where monopoly either legalized or otherwise arises the common law has in its a latent power which might be expressed in constitutional terms by saying that the buyer or consumer has a due-process right, so to speak; or if he doesn't have it by a revivification of the common-law principles that were applied in the period of which you speak, that the Government owes an obligation to protect the buyer, the consumer, as competition did or was supposed to have protected him.

Professor FETTER. Your statement delights me, Mr. Frank. I feel strongly that we must recognize this recrudescence of the problem of the fewness of sellers and the old common-law doctrine—an economist speaking on the law now.

Mr. FRANK. Lawyers purport sometimes to speak on economics so there ought to be reciprocity.

Professor FETTER. We just can't keep off of each other's territory.

The CHAIRMAN. Will it be convenient to resume at 2 o'clock? The committee will stand in recess until 2 o'clock.

(Whereupon, at 12:10 noon, a recess was taken until 2 p. m. of the same day.)

AFTERNOON SESSION

The committee resumed at 2:30 p. m. on the expiration of the recess.

The CHAIRMAN. The committee will please come to order. You are ready to proceed?

Mr. BALLINGER. Yes.

The CHAIRMAN. All right, Professor Fetter.

Professor FETTER. I think I was perhaps midway in a question, but if I may pass that and have it raised later, I will conclude with

reference to the charts and speak for a moment on this, chart C, where we were speaking of two or more isolated and independent producers and producing points.

(The chart referred to was marked "Exhibit No. 356" and is included in the appendix on p. 2190.)

Professor FETTER. There are no competitors around it to make it behave in a competitive manner, and it finds itself with a certain latent monopoly power, and the question is, What will it do with it? It might go on behaving very much as if it were surrounded with competitors and sell at uniform prices, as we saw would be necessary if there were competitors surrounding it, but it now has the power to discriminate, and this is both theory and history.

That power when it is first acquired is used sporadically, unsystematically, in a sort of opportunist manner. Each mill isolated there begins to deal with each customer as it has to, individually and separately. In other words, it has the power to depart from uniform prices, which prevailed in the competitive market. It can discriminate and, I think, it is the whole history of our industry in the last 75 years since this geographical factor has become so important that it does discriminate. And what happens—something like an orgy of discrimination. Each mill has it in its power. It is a game at which more than one can play, and so they proceed to play it; and I think it is not exaggerating the analogy to say that this power of discrimination is like a dagger that you give to two or more competitors and lock them in a dark room and say, "Go to it."

The result is a sort of chaos and anarchy of competition, but our analysis here has shown that that is truly not competition, but it is monopoly exercising its new-found right. It is like giving a boy an air gun, and he shoots himself in the mouth, and it is that condition of anarchistic discrimination, I should say, rather than competition, which all of these basing-point industries went through at a certain time in their history. That was more or less the situation throughout the nineties, a depressed period in which mergers were being rapidly formed and which most of the subsidiaries that came to make up the United States Steel Corporation were formed, as horizontal mergers of a number of former competitors in the same line of business; that is, a combination of numerous mills and locations producing the same kind of goods.

Then, as we saw, this was followed by the holding-company device which was more of an integrating merger, which united all these various types of horizontal subsidiaries, and I remember well in the nineties that the price of some kinds of products in that depression reached a most abnormally low stage. I remember this illustration that went the rounds of the papers.

Representative SUMNERS. What period do you speak of at the moment?

Professor FETTER. The nineties, the latter nineties. At that time wages in the building trades ran around \$2.50 to \$3, and the estimate was made that at the price of wire nails at that time that it did not pay a contractor to have his carpenter stoop down and pick up the wire nail; that the price that he was paying for his labor exceeded the price of the wire nail. That was given, of course, as a paradoxical and extreme illustration and held for only a short time.

Representative SUMNERS. What wage were the laborers getting who were producing the wire nails then at that period?

Professor FETTER. That I do not know; they were low wages, of course, compared with the present scale. About 5 years after that time I built a house entirely by union labor, not a stroke on it by nonunion labor, in which the union scale for carpenters was \$2.50. That was, of course, not in a big city. Now the basing-point practice may be, I think, fairly conceived of, trying to look at the thing with unprejudiced eyes, as the method discovered and adopted by the industries, one after the other, for escaping from this period of anarchistic discrimination, and they experimented with it, and they finally hit upon this device.

For many years they had great trouble in getting the habit established; it was so easy for individuals to break away; they were constantly tempted by the desire to get an order by quoting just a little bit below the formula, but what they finally hit on was this mutual discrimination, mutual dumping, as we have called it, into each other's controlled territory, but exactly following the formula, each one matching the delivered price in the territory of the other mill.

From time to time, especially in periods of depression, as witnesses of industries have repeatedly emphasized, the thing would break down. Ordinarily, it would work very well indeed during periods of rising prices and general prosperity, and now and then some individual, separate corporation, would try to beat the game, and then there would come trouble. There were various methods of discipline with large merged industries where the dominant interest in the industry had a number of mills, and they were able, practically free from discovery, to delegate fighting mills. It can be done in ways which probably just elude discovery.

Representative SUMNERS. While we are on that point, if you could discover it, what would you find as to the method of disciplining competition?

Professor FETTER. We know a number of things that have been done in the steel and other industries—just a general price war in which the whole base prices are cut to the bone was the thing that Judge Gary repeatedly threatened in these Gary dinners.

Representative SUMNERS. You mean if a small mill was reducing its price in a territory then they would threaten to send in commodities from their own mill at a lower price than the small mill could compete with.

Professor FETTER. There are two methods of cutting prices that can be pretty clearly distinguished. One is the cutting of base prices generally.

Representative SUMNERS. You mean for the general market?

Professor FETTER. For the general market. The other is to cut the base price of a mill that is closest to the offender.

Representative SUMNERS. Would this mill that would cut its prices be at all sustained by the group of mills that were opposed to the reduced price?

Professor FETTER. I couldn't say as to that.

Representative SUMNERS. What I mean is, suppose there was another reasonably small mill that was going along with the big organization in the neighborhood of the mill that had initiated the cut

price. Would they designate this neighboring mill to meet the price of the reducing competitor, or how would they go about it?

Professor FETTER. Congressman, I don't believe you can get as tangible evidence as that. We know such cases, for example, as the rather classic case of the cement industry putting in a mill base at the South Dakota State mill. When a corporation that has mills several hundred miles away put in a basing-point at a mill which they don't own, they are reducing the price in all that territory. It is a punitive measure if another corporation puts in a basing-point at the mill of the offending corporation.

Representative SUMNERS. I don't want to lead you away from your discussion, but I am wondering if you are going to cover the possible efficacy of any sort of regulation which would require a mill covering a broad market that would reduce its price to force a competitor to make that price general in its market, varied by difference in freight rates.

Professor FETTER. Well, I take it that is what the Clayton Act was intended to do. I think the Clayton Act was formulated in the period when the problem was felt to be the problem of cutthroat competition, the effort of one corporation to crush out another corporation. It was not conceived of as primarily and directly to protect the consumer. Indirectly, of course, the thought was you would protect the consumer by preventing cutthroat competition.

Representative SUMNERS. Those are general terms that you are using now, if you will pardon me. I was attempting to inquire with reference to specific policies in the event prices were cut obviously for the purpose of destroying the competitor. Have you people ever considered the possible efficacy of compelling uniform prices in the sales territory of a big concern that would reduce its prices in a given territory to destroy a local competitor?

Professor FETTER. That thought has been considered by various bodies, and I think it is something that this committee should very seriously consider, but whether public opinion would support such a measure that is a matter of serious consideration.

Representative SUMNERS. My inquiry is for eliciting information, not for getting judgment. Maybe I am leading you away from your particular subject.

Professor FETTER. I was simply pointing out here how the basing-point practice is a systematizing, an organizing of discrimination in a way which will prevent this whittling away of prices, in a way which it did in a number of industries. That is a matter of history, I think, and those industries look back upon that period with a certain horror, and they look upon the proposal to abolish the basing point practice as a proposal to bring back the bad old days, as they look upon it.

The CHAIRMAN. This basing-point system developed, in the first instance, in steel, did it not?

Professor FETTER. Yes; it did.

The CHAIRMAN. Now, on several occasions during this testimony we have heard reference to cement as another product in which the basing-point system appears to be used. What would you say, from your experience and study of this subject, as to whether or not the basing-point system has not been particularly exemplified or devel-

oped where the product is of a uniform quality? Now, steel is steel, generally speaking, so that the competing manufacturers of the product have nothing on which to appeal to their purchasers in the quality of the product itself, have they?

Professor FETTER. That is their own——

The CHAIRMAN (interposing). Now the same is true with respect to cement. Cement is cement, just as sugar is sugar.

Professor FETTER. The companies say so.

The CHAIRMAN. Is that a fact or is it not a fact, according to your experience?

Professor FETTER. I have no direct experience in that. I know it is a common opinion outside that there are really differences of quality, but not so material that the average users consider it.

The CHAIRMAN. I confess that, for my own part with respect to sugar, I always like to differentiate beet sugar from cane sugar, and I would prefer beet sugar because we produce sugar beets in Wyoming; but for the life of me I really can't tell any difference, except that I am told by the trade that beet sugar doesn't ordinarily go into cubes or dominoes, so that, except for that physical form in which it is presented, I can't tell one from the other and I doubt if any other consumer can.

Professor FETTER. Well, whatever the differences, though, when subjected to scientific measurement, they are nevertheless so small the average user doesn't notice them. They can be treated as homogeneous.

The CHAIRMAN. Do you think there is any justification for the basing-point system which is an effort to maintain a stabilized price where the product is uniform?

Professor FETTER. That is the only sort of industry, apparently, that uses it.

The CHAIRMAN. Then would you say that it is a natural result of the fact that the products which these industries manufacture are uniform in quality?

Professor FETTER. Not at all, Senator, not at all. I would not say it is natural. It is possible to grade many agricultural products just about as closely as you grade these industrial and fabricated products. That doesn't lead to the basing-point practice.

The CHAIRMAN. Agricultural products fall into an utterly different category because, as has already been demonstrated before this committee, the agricultural products are the products of individual flesh-and-blood producers.

Professor FETTER. There you are getting at the cause.

The CHAIRMAN. Industrial products are produced by corporations. I think it was the testimony before this committee that corporations produce less than 10 percent of the total agricultural output of the country, whereas, with respect to almost any other product, certainly with respect to steel, with respect to cement, with respect to refined sugar, the product is put upon the market by the corporation.

That makes a tremendous difference. So I can't make any comparison in my own mind between the price rule which obtains in the agricultural industry and that which obtains in the industrial industry. It is my feeling that the farmer takes the price which he can get. He ships his product to a central market and then he hopes that circumstances will be such as to enable him to get a

price that will make it possible for him to recoup the cost of production; whereas, if he wants to buy a Ford car or a radio or steel for his barn or whatever he may want in the way of industrial products, he goes to the town and he pays the price that is fixed. He is in an utterly different category; isn't that true?

Professor FETTER. That is true, but I would not make the difference consist in a charter of incorporations. I would make it consist in the difference in the number of sellers and in the existence, therefore, of competition.

The CHAIRMAN. Well, that is saying the same thing in another way.

Professor FETTER. If you consider it so.

The CHAIRMAN. The number of the sellers in the industrial field is reduced because of the fact that the corporation is an instrumentality for making collective enterprise possible. A corporation, insofar as these products which we are concerned with now, cement and steel and sugar, are concerned, is an instrumentality, an artificial agency which enables a large number of people to contribute their capital to a big enterprise. It is a collective effort.

Professor FETTER. Yes; and our corporation laws, it is true, have permitted the merger of a large number of these enterprises.

The CHAIRMAN. Yes; and it is, therefore, the corporation law and the merging of corporations that has limited the number of sellers in the industry in the field and brought about the condition of which you are speaking.

Professor FETTER. When you use the word "merger," then we are going down the same road. It is to account for the great reduction in the number of sellers, and there has been a very great deal of emphasis, I think—

The CHAIRMAN (interposing). What impresses me, Professor Fetter, is this: We are dealing with now, so far as the basing-point system is concerned, primarily with steel and have mentioned cement, sugar—there may be others. Now, if you think of automobiles, on the other hand, you think of a product which is sold ordinarily f. o. b. The purchaser of an automobile pays the price at the mill, or at the factory, plus the transportation charge. Is that not the case?

Professor FETTER. That is, but generally there are some little exceptions.

The CHAIRMAN. Some little exceptions; but by and large, we are speaking of. Now, here we are dealing with a commodity which is differentiating, which is not uniform. You may want a Cadillac, I may want a Ford, or somebody else may want a Chrysler car, or what not, according to our particular personal desire. So apparently the basing-point system does not operate with respect to motorcars; because there you are not dealing with a uniform product.

Professor FETTER. I think that enters into it.

The CHAIRMAN. Well, is it not significant?

Professor FETTER. It is impossible to administer a basing-point practice of identical delivered prices unless the products are homogeneous.

The CHAIRMAN. Then let us take another case.

Professor FETTER. But there must be other conditions besides that.

The CHAIRMAN. Let us take the case of cigarettes, for example, and candy, confectionery, commodities of that kind. There is a single

price for cigarettes of a particular brand, or of two or three competing brands, all over the country, without respect to freight at all. Now, is that a good system or a bad system? Chesterfields, Camels, Lucky Strikes, all sell for the same price, regardless of the freight which is to be charged by the transportation.

Professor FETTER. And necessarily; we listen to a good deal of balleyhoo over the radio about differences of quality.

The CHAIRMAN. Certainly, and if you listen to that you might think that Lucky Strikes were really good for the throat, you know; you might do that. But what I am getting at now is there are apparently different methods of pricing in these different commodities and I am wondering whether as a result of your studies, you think there is any justification for the belief that the character of the commodity determines the method of sale; that is to say, whether or not a basing-point system is used.

Professor FETTER. No; it is one of the necessary conditions. Basing-point practice is found only in those industries where the products are homogeneous, and as we have seen, where you deal with extras, that are not homogeneous, they reduce them very carefully.

The CHAIRMAN. Now cigarettes are homogeneous, but there is no basing-point system there, is there?

Professor FETTER. Well, I am not so sure about the conditions there. It is a very light product, where the element of freight plays a very small part.

Representative SUMNERS. People believe it to be different. They go in and ask not just for a package of cigarettes, but one package—one has one delusion and the other another.

The CHAIRMAN. It is all a delusion.

Representative SUMNERS. They do call for a different brand of cigarettes.

Professor FETTER. At least it is all smoke.

Mr. FRANK. Professor Fetter, is it true—I am just asking for information, that the automobile industry does not use in part a basing point? For instance, if I buy a car that is assembled in Philadelphia, in Philadelphia, do I not pay the price f. o. b. Detroit, plus freight from Detroit?

Professor FETTER. That is my understanding.

The CHAIRMAN. That probably is true. I was merely thinking of the advertisements that are usually f. o. b. Detroit.

Mr. FRANK. It may have been modified, but I thought that was true. I was just asking for information.

The CHAIRMAN. But most of the assembly plants are not pretty well scattered, or are they? Can you answer that, Mr. Hinrichs?

Mr. HINRICHs. They are quite well scattered, and becoming more so.

The CHAIRMAN. And you think the basing-point system is used with respect to automobiles?

Mr. HINRICHs. I may be confused as to what the basing-point system is, but I would assume that the prize example of basing-point would be a system in which there was only a single basing-point in the country, from which delivered prices were figured; that is, if you picked a single-producing center as the exclusive point on which prices were quoted that that would be a very excellent illustration of basing-point practice.

Professor FETTER. It would be an excellent illustration, but it would not exhaust the practice by any means.

Representative SUMNERS. In the basing-point, with regard to automobiles, take for instance Detroit, if you get your car from Philadelphia you pay the Detroit price, plus the freight from Washington to Detroit, even though you may get your car from Philadelphia; whereas when the shipment is made they ship the parts from Detroit to Philadelphia at a lower rate of freight than they charge for the full car, maybe, and that would be to that degree your shipping point operation, would operate in that situation?

Professor FETTER. I think that certain elements of the basing-point practice are creeping into those industries that ship and assemble elsewhere. It is only a very minor degree. For instance, some of the Detroit manufacturers or Michigan manufacturers have assembling plants on the Pacific coast and it is evident that they are able to ship in a way to save \$40 or \$50 at least; I do not know how much more, over the all-rail freight in that way, and then they proceed to charge on the Pacific coast on the basing-point principle, of the all-rail freight to the various points on the Pacific coast.

Representative SUMNERS. I want to ask just one question, if I may. That is as to what it is all about, what we are trying to get at. Suppose Pittsburgh is the basing-point and my home is Dallas and we try to start some business activity there. If Pittsburgh is the basing-point for the territory which would include Dallas and Waxahachie, Waxahachie being 30 miles from Dallas, the person who lives at Waxahachie 30 miles from Dallas could buy a commodity assembled at Pittsburgh, if the basing-point system operated, as cheaply as somebody could get it 30 miles from Pittsburgh. Is that right under the operation of the system?

Professor FETTER. Oh, no; I think not.

Representative SUMNERS. What would interfere with that?

Professor FETTER. As cheaply? Do you mean delivered?

Representative SUMNERS. That is right.

Professor FETTER. No. If Pittsburgh were the basing-point it would be the Pittsburgh-base price plus the full rail rate to this point in Texas.

Representative SUMNERS. To Waxahachie.

Professor FETTER. Yes; I suppose so.

Representative SUMNERS. If that same steel concern had a plant at Dallas 30 miles away, what would they charge?

Professor FETTER. That is just the case that we were discussing there.

Representative SUMNERS. That is just the case I am asking about.

Professor FETTER. What will they do?

Representative SUMNERS. That is what I am asking. What do they do?

Professor FETTER. What they do under the basing-point practice is to continue without a basing-point of their own.

Representative SUMNERS. Let me talk about something concrete here now.

Professor FETTER. Yes; that is what they are doing.

Representative SUMNERS. I am afraid your answer is not right clear. May I ask it again so as to get it clearly in the record. Sup-

pose a concern has a factory at Pittsburgh and has a factory at Dallas, we will say in round numbers a thousand miles apart. If I have to be exact I will get the map and figure it out, but I am just guessing a thousand. I thought those figures would do sufficiently for the purpose of getting the facts. From Dallas to Waxahachie is 30 miles, and they have got a plant at Dallas. Would the man who lives 30 miles from Dallas have to pay the same freight as the man who lives 30 miles from Pittsburgh?

Professor FETTER. Very much more freight. He would have to pay the freight from Pittsburgh to this point that you speak of.

Representative SUMNERS. To Dallas.

Mr. FERGUSON. Notwithstanding that the product was manufactured in Dallas.

Mr. BURR. Where is the basing-point—at Dallas?

Representative SUMNERS. The basing-point is Pittsburgh.

Professor FETTER. There is no basing-point at Dallas?

Representative SUMNERS. No; but I am trying to give you a "suppose" case here. I don't know where basing-points are.

Mr. BALLINGER. Judge, if you purchase in Dallas from the manufacturer in Dallas you pay the rates from Pittsburgh, the phantom freight that didn't actually occur and was fictitious purely.

Professor FETTER. It is impossible to answer the question as you have asked it unless you know whether this Texas plant is a basing-point.

Representative SUMNERS. It is not.

Professor FETTER. Then if it is not, its price is based upon the Pittsburgh price, and the price of delivery at any point in Texas from this Dallas mill will be the Pittsburgh price plus the freight from Pittsburgh.

Representative SUMNERS. That is what I was trying to get at.

(Representative Sumners, vice chairman, assumed the Chair.)

Mr. DAVIS. With reference to the discussion on automobiles, I think we are all generally aware that almost any automobile, any make of automobile, is priced at the factory price plus the freight from the factory to the point of delivery—Washington, Philadelphia—wherever the case may be. But here is one distinction between that and the industries in which the basing-point is employed, that if the purchaser, as they do from time to time, desires to go to the factory and get his car, he can get an order from his local dealer and go there and get the car and bring it home and save the freight, but you can't do that where the basing-point system applies because they will only make you a delivered price, which means the basing-point price plus freight, no matter if you offered to deliver it yourself or to send your own truck for it, or what not.

Vice Chairman SUMNERS. In the event we take Dallas as an instance, it is a point where they assemble cars for one of the factories. You buy a car at Dallas and you can get it at the price charged at Detroit plus the freight on the assembled car as distinguished from the parts. It is the assembled car, isn't it?

Mr. DAVIS. I think they are supposed to, as far as we know, add the actual price, the assembly price, but perhaps it would be that plus the price of parts to the point of assembly.

Vice Chairman SUMNERS. Professor, do you expect to develop further how this practice affects the development of monopoly?

Mr. DAVIS. Well, they have been talking on that for 2 days, and I think you will find that all in the record.

Vice Chairman SUMNERS. I've no business asking questions, I wasn't here then.

Mr. DAVIS. I am sure that Professor Fetter will be more than glad to make a brief explanation of the way it works.

Mr. BALLINGER. Professor Fetter, this practice, if it does obtain in the automobile industry, is not to be likened to a basing-point system, is it, because the effect of a basing-point system is a repress price competition, and I don't think the Federal Trade Commission has found any repression of price competition in the automobile industry, that is as far as the manufacturer is concerned in selling the product?

Professor FETTER. No; I have always looked upon the automobile industry as a sort of shining example of a large industry that has pretty successfully avoided the basing-point practice. A friend of mine in that industry wrote me not long ago a sort of conscience letter telling about how it was gradually edging in a little bit because of this assembly business, but that is a very, very small peccadillo of offense against uniform pricing, if any. I gave him some conscientious advice and told him I thought he had better cut out that little petty practice, but I think they will not do it.

(Representative Reece assumed the Chair.)

Mr. HINRICHS. Mr. Chairman, in connection with that example that you have given of the automobile industry as illustrating competition, I want to know something about what we mean, then, by the basing-point system. In terms of the mechanics of having a price f. o. b. Detroit plus freight to the point of delivery, the automobile industry operates on this system of based prices. The prices of the cars are not identical at Detroit and may very well be priced in such fashion as to give rise to real competition in the basing price itself. Is that what you mean by saying that there is competition in the automobile industry, that is when Ford, Chrysler, and Chevrolet set their prices they set them with reference to each other in an effort to capture as large a share of the market as they can, while they nevertheless set their prices as prices f. o. b. Detroit no matter where the car is assembled.

Professor FETTER. I do not recall using the expression that there is competition in the automobile industry, but with reference to your last question I believe that is true. I have felt that the existence of Henry Ford and his individual attitude was perhaps the reason why we hadn't had monopoly quicker in the automobile business, despite the large amount of merging, there evidently is there, to the outside observer, active competition as regards models, styles, types, and so forth. So we have the benefit of technical progress there. I think it seems to be the general principle, to a very large degree.

Mr. HINRICHS. There is a second characteristic of those automobile prices that is in outward aspect somewhat like the basing-price system, that is that the prices are published in advance and are maintained for rather considerable periods of time unchanged, ordinarily

from one model year to the next. So the mere fact that prices are published doesn't constitute the basic criterion that there is or is not monopoly in the pricing system.

Professor FETTER. No; I would say not. The prices of automobiles apparently are quoted on the mill. You hear of f. o. b. Flint and f. o. b. Lansing, as well as f. o. b. Detroit. It is simply that we more frequently hear f. o. b. Detroit, and I take it each of these quotations is an independent quotation. The uniformity is in the way in which the customers of the particular automobile company are treated. There is not a uniformity in the price of automobiles of different makes; that is a different question.

(Senator O'Mahoney resumed the Chair.)

Mr. HINRICHS. So the peculiarity of this basing price that you are talking about is the identity of the quoted prices at the base by all of the different companies. The fact that you have identical quotations on as nearly as you can tell identical products at these basing-points is the thing that gives the peculiar character to the basing-point system that you have been describing.

Professor FETTER. I would be inclined to call the identical delivered prices the result of a method rather than the method itself.

I was asked by the newspaper men to formulate (they are always getting Robinson Crusoe in words of one syllable) a definition of basing price in 50 words. I think I have got it in 51 or 52 here, and perhaps if I read it, it would help. I am not at all sure that this is completely bomb proof, but this is an honest effort. "The basing-point practice is quoting and selling in certain territory" (that is to cover the control area) "homogeneous products by a formula of delivered prices identical with that of another mill or mills made up of the base price of another mill than the one selling." I think that is really the crux of it—the formula is based upon another mill than the one selling, "plus freight from that mill," not the mill selling.

The CHAIRMAN. I am afraid that no headline writer is going to make very much out of that. You understand that economists have their rules and their habits and lawyers their rules and their habits; newspapermen are worse than either, they have got to get it down into just a few letters.

Professor FETTER. This is as near, you know, as economists can come to words of one syllable.

I add one phrase to that that I think is helpful: "It necessarily involves refusal to sell at f. o. b. prices." That is the point.

The CHAIRMAN. Would you accept an amendment and say it is necessarily involved?

Professor FETTER. I think so. I think that is the trouble with it.

Mr. BALLINGER. Dr. Hinrichs, you said that it was the identity of the prices at base. That is not, I think, absolutely correct. It is the identity of prices at the point of delivery. If all prices were identical at base, there might be different prices at point of delivery. I think Professor Fetter will correct me.

Professor FETTER. Yes. I didn't catch that phrase.

Mr. HINRICHS. Well, the prices are identical at the base-point in which they are quoted and also at points of delivery from the base, figured by the formula of base plus freight.

The CHAIRMAN. Isn't it true that actually it is the lowest sum of price plus freight at a given destination that determines the price?

Mr. BURR. That is determined by the governing basing-point.

The CHAIRMAN. Certainly.

Professor FETTER. Each destination is in some area of that kind. Every destination in the country lies inside of some basing-point controlled area. Even if there were only one basing-point for the whole country, that would be so.

The CHAIRMAN. When you speak of a basing-point, you mean the point at which the f. o. b. price is effective, which is taken as the base for the entire field in which the basing-point system operates, and then you add to that price the freight to the point of destination—

Mr. DAVIS (interposing). From the nearest basing-point.

The CHAIRMAN. Without regard to the point of origin of the shipment. Isn't that it?

Professor FETTER. Yes; and I think that is covered by a definition given in the Encyclopedia of the Social Sciences.

The CHAIRMAN. Oh, well, let's have that.

Professor FETTER. Now, you can see these rival definitions. "Basing-point prices are delivered prices calculated by adding together the established price at some point called the basing-point and specified freight charges from such point to the several points for which these prices are made, this formula being irrespective of actual origin of shipments or of actual freight incurred." That is the point which the Commissioner makes.

The CHAIRMAN. Of course, the purpose of that is to maintain so far as possible a uniform price system through the largest possible area.

Professor FETTER. Yes.

The CHAIRMAN. Another purpose, of course, is to maintain prices properly.

Now, the significance of this system was brought home to me only this week by a certain incident that has happened. Everybody knows the degree to which motortrucks have been competing with the railroads in the transportation of freight and particularly in the transportation of motorcars. Within the week, because the motor transportation from Detroit to Denver has resulted in tremendous competition with the railroads, cutting down their business, the railroads made application to the Interstate Commerce Commission and received a decision by which they were granted a 10-percent reduction in the freight from Detroit to Denver. Now, the city of Cheyenne, which is only about 103 miles north of Denver and which is on the main line of the Union Pacific Railroad and which is a railroad division point, has as a matter of policy attempted to discourage the transportation of motorcars by truck in order to favor the railroad. But the decision of the Interstate Commerce Commission now gives Denver, which did not attempt to discourage transportation by truck, a 10-percent advantage over Cheyenne, and now, of course, the motor distributors in Cheyenne are asking me to try to persuade the Interstate Commerce Commission to give them a 10-percent reduction on railroad freight also.

Obviously, if there had been this basing-point system in effect, the price of motorcars would be the same in Cheyenne as in Denver, and there would be no question about this 10-percent reduction.

Mr. DAVIS. And, Senator, the delivered price would have been no cheaper even though they could be brought cheaper by truck because the price is the railroad freight and not the truck freight.

The CHAIRMAN. You are right.

Mr. DAVIS. Of course, that applies equally with respect to water transportation which is always cheaper but which never applies where the basing-point system is operated.

The CHAIRMAN. It raises the question whether or not in the last analysis it is not beneficial to local industry to have a fixed delivered price, and whether or not it wouldn't be the best solution of this problem if there could be divorcement, as it were, of the effort to fix these prices for the purpose of holding the price to the consumer up from the more beneficial effect of maintaining a standard price for all purchasers. That, it seems to me, is the question.

Professor FETTER. Something for the committee to consider.

The CHAIRMAN. Yes; but I am asking your opinion now because you have studied this. You have been studying it, may I say, largely from the point of view of one who has seen the effect of the basing-point system in maintaining the prices to the consumer, and I am wondering whether you have given consideration to the possibility that the standardization of prices in homogeneous commodities all through the country may not be beneficial in some respects, at least.

I see Mr. Burr is very anxious to answer that question.

Mr. BURR. No; I am not. If you will excuse me, Senator, all I want to do is to get you, if you will, to say what you mean by standardization. Do you mean standardization by the industry, by some industry leader, by the Federal Government, or by whom? If I could get you to clarify that.

Mr. BALLINGER. Any kind of standardization.

The CHAIRMAN. Any kind of standardization, as Mr. Ballinger says. What I have in mind now is the standardization which we have with respect to cigarettes, for example. What are the factors which have brought about this fixed price for cigarettes? You can go into a drug store in Washington, D. C., or in Seattle, Wash., and you pay the same price for a package or a carton of cigarettes.

Mr. BURR. Of each of various varieties? I have never looked into the cigarette industry and I do not know whether that is price leadership or price understanding.

The CHAIRMAN. Now that is what is called, I think, the postage-stamp system of prices. Now postage stamps are the same in price to the citizens of America in whatever post office you buy them.

Mr. BURR. There is quite a little difference—

Mr. BALLINGER (interposing). It is a legal monopoly.

The CHAIRMAN. But it was made so because it was conceived by the framers of the Constitution and Congress that that would be a beneficial thing. Now this price system of which I am speaking to you—which is exemplified in the case of cigarettes—is called the postage-stamp system. So the question which poses itself is: Is that sort of a pricing system a beneficial one where obviously there is no actual competition among the varieties, and the difference, the choice of the consumer, is based wholly upon the degree to which he is responsive to advertising on the radio and on the stands, and the degree to which he thinks that one particular brand tastes better than another?

Professor FETTER. Certainly we would not choose the tobacco industry as a fabricating industry that exemplifies pure competition. Even since the days of the decision in the *Tobacco case* in 1911, there has been a very large amount of concentration of ownership and control there, and it is a product of very light weight and the cost of shipping that is very small. I would think that you might have a uniformity of price, such as you note for the different brands, if they are of equal quality, whether it was monopoly or competition. I do not think that would tell the story. You may be having a high monopoly price here, a high price because it is monopoly, or if you had true competition you might have it uniformly low, with very little difference in the delivered price in different parts of the country, because of the small cost of the freight. The postage-stamp rate in transportation refers to an equal rate, no matter what the distance is. It does not refer to an equal price.

The CHAIRMAN. Well, have you given any consideration to this phase of the problem? If there were no basing-point system and no delivered-price system, what would be the effect upon the development of industry in States which are far distant from the centers of population?

Professor FETTER. My judgment is that it would tend very largely toward decentralization of physical plants in industry, and would tend to decentralize the control of industry to a considerable extent, and to make industries serve their own communities and neighborhoods to a greater extent, and make collusive prices more difficult, if not impossible.

The CHAIRMAN. I say that because on one occasion, a year or so ago, the executive officer of a large sugar-beet refining company stated to me his belief that the uniformity of price for sugar is a material factor in enabling western sugar factories to produce a much greater output than they would if that system were not in effect. Now I made no effort at the time to study it and I have no opinion upon the matter, but I am merely stating the conclusion that was expressed to me.

Professor FETTER. I thought maybe you might hit upon that sugar industry. It is so near to you there, up in Idaho, and I have heard——

The CHAIRMAN (interposing): Wyoming, please.

Professor FETTER. Well, I meant in the neighboring State. That is the one I have heard about.

The CHAIRMAN. You surprise me, Professor.

Professor FETTER. I have heard of Idaho beet sugar and Idaho potatoes and, of course, of the many virtues of Wyoming.

The CHAIRMAN. In other words, Wyoming is more famous to you for its virtues than for its products.

Professor FETTER. Well, the complaints of the farmers in all that region are loud and frequent. They sell their beets and those beets are made into sugar, and they buy the sugar back at the price of San Francisco plus, as if their beet sugar had been shipped to San Francisco and shipped back to them.

The CHAIRMAN. Well, there is a more exciting instance even than that. It is the case of gasoline. In Wyoming we have the Salt Creek oil field and the Teapot Dome, of which the whole country

has heard. We produce a very high grade of natural petroleum, crude petroleum, and we have refineries there—the Midwest Oil Co., and the Standard Oil Co. of Indiana, and the Sinclair Refining Co., and yet though the crude petroleum is pumped out of the soil, as it were, in Wyoming and refined in Wyoming, and turned into the tanks of the filling station in Wyoming, the Wyoming citizen who rolls up in his automobile to the Standard Oil filling station immediately outside of the Standard Oil refinery pays a price Tulsa plus, not the price of oil as refined in Wyoming from Wyoming crude, but as though that oil had been refined in Oklahoma and transported by railroad all the way from Tulsa to Caspar; and there our people pay this phantom freight. So it is a matter of great interest to the consumer as to whether or not that is a system which should be permitted to exist.

Professor FETTER. These illustrations all are very pertinent to show how the basing-point practice inverts geographical relations. There is something rather offensive to the reason of men that it should do that.

The CHAIRMAN. If you had not emphasized the virtues of Wyoming I probably would not have given you the example of that Wyoming product.

Professor FETTER. I think I got my reward.

Mr. BALLINGER. I think we did not answer your question about the cigarette industry. I think you asked why we did not have stabilized prices in the cigarette industry.

The CHAIRMAN. I did not put it quite that way, but I will be very glad to have that answer.

Mr. BALLINGER. It depends on how those stabilized prices are arrived at; if they are arrived at by manipulation you will not be willing to let that continue without the Government stepping in and determining what was the fair rate of return to that industry, which would, of course, be a tremendous problem. If, on the other hand, we decide to break up that stabilization of prices by enforcement of the antitrust laws, the chances are we will get our cigarettes more cheaply in the end and I think there is a whole school of opinion that holds we might get them more cheaply in the end than if we created a public utility.

Certainly the most amazing example of cheapness is the automobile industry, starting out with cars costing \$5,000 and \$10,000, now down to \$450, by a competitive system. In other words, that is the great argument for the competitive system, that if you give it a chance it may give you the cheapest prices you can possibly get; if you venture with the public utility you may run into all kinds of snarls; the question of honest regulation, the question of what base you are going to use, all kinds of tangled problems, and you may end up with very little achievement as has been the case in a number of public utilities.

Mr. DAVIS. In addition to that, and referring again to the automobile industry, you not only have a marked lessening in price, but you have a marked increase in quality because they are all competing with each other on quality and attractive features of their respective automobiles, as well as in price.

Mr. FRANK. Professor Fetter, although the basing-point system may be one means by which monopoly is procured, you would not

say, would you, that the abolition of the basing-point system would mean the end of monopoly?

Professor FETTER. Certainly not. The ways of monopoly are devious, and it is exceedingly ingenious. I discussed that somewhat last week here, that the ways of monopoly are protean. You never may be sure. You may stop this gap, and then you may have another one to stop later, but this is the truth, that the basing-point practice is far and away the most successful single device that large American business in these homogeneous products has hit upon in the last 75 years, and the thing to do is to take one thing after another, as you find it. If we can put an end to that we have at least stopped that difficulty.

Mr. FRANK. But the consequences of breaking up the basing-point system would be, as you have indicated, decentralization. Now there could be decentralization of manufacturing and yet integration in ownership, could there not?

Professor FETTER. Yes.

Mr. FRANK. So there might be differentials in the prices to the consumer and, never-the-less, we might still have a condition that would not be competition.

Professor FETTER. I think when you speak of integration of ownership, are you not referring there rather to horizontal financial merger?

Mr. FRANK. Let me put it differently. You could have something that was not competition between units of the industry, separately owned, and yet have decentralization with differentiated prices in different localities, to the benefit of the consumer. That is conceivable, is it not?

Professor FETTER. I think so. If there is no further question at this point, I would just add this to our discussion about the effect of the basing-point, still referring to our chart C for a moment. Now the effect of this practice of exactly matching the delivered prices in each territory so that every bidder and every seller knows exactly what he has to meet and will exactly meet it is that there is no price competition anywhere. One question I never have been able to answer at all satisfactorily to myself is why any mill would voluntarily be a basing-point mill. Why are they not all non-basing-point mills? Because, permitted this system of matching prices, a mill does not cut itself out of sales at all by raising its base price so high that it becomes a non-basing-point mill. That is, it does not cut itself out of sales because it can still continue to bid and quote just as before. Each one of these mills can quote in the other territory with the certainty that none of these other fellows who are playing the game will cut its price by one single cent per ton or per barrel.

Now, that relieves them from all pressure to keep base prices down, excepting one, and it is exactly the same pressure or motive that a complete monopoly would have, a monopoly in the sense of complete unified ownership of all the mills of the country in any one industry; namely, the essential monopolistic limitation of charging what the traffic will bear, because the very extremest monopoly has to consider that. It can price itself out of the market. Fortunately, there is still a considerable degree of interindustry and interproduct competition, but that is not the thing that is considered by the antitrust laws.

The antitrust laws are concerned with competition within an industry and among the members of that industry, but this interproduct competition is pretty nearly the only protection the public has left, when you have a system like the basing-point in an industry. And that becomes a motive undoubtedly for a mill or some mill in a neighborhood that is so far-away that its delivered price is very high. It becomes a motive for putting in a base price. The price is too high in that neighborhood; the benevolent monopolist would lower the price there.

The benevolent absolute monopolist, the man who has complete control, finds that he is operating under that limitation. It is charging, the principle of charging, what the traffic will bear that does keep these prices from going out into the stratosphere.

But that is not the determination of prices on what we would consider a fair, normal competitive level at all. It may permit those prices to be 50 percent or 100 percent higher than they would be if we had anything like normal competition.

I might discuss at some length—but I think we might dispense with any long discussion of that subject—the matter of the results of the basing-point practice in waste and inefficiency. It has a certain connection with this point I have just spoken of. The base prices can be lifted and are lifted in each neighborhood without any fear at all that one or the other—that is, as long as the system is working; once in a while somebody breaks away from it—without any fear that that price will be cut by a single penny, and that would have a tendency to raise it and raise it until the producers in that territory felt that the price was too high and they were cutting off the consumer demand.

Now that would seem to make a very high price and would give an enormous profit to the industry, but these industries all complain that their profits are very limited, and there we at once turn our attention to the evident wastes of the industry. I will just enumerate those. I won't attempt to discuss them in detail further unless it is the desire of the committee that I should do so.

There is, of course, first, the tremendous waste of cross-hauling. The basing-point industries themselves are conscious of that. It is the economic absurdity of carrying loads of brick from one side of the road to the other and back again.

I have one little chart here of actual cross shipments. This was testimony taken in the Lackawanna merger. It is a public document.

Mr. FERGUSON. Identify it for the record, please.

Professor FETTER. I will call this chart F on "Cross hauling in steel," which shows actual orders in shipments.

(The chart referred to was marked "Exhibit No. 357" and is included in appendix on p. 2191.)

Professor FETTER. This is Lackawanna, this point here is Cleveland, that is Youngstown, this is Pittsburgh, this is Johnstown, this is Pottsville, this is Baltimore, and this is Wilmington, and that one is Bethlehem. It shows the cross shipments like a spider web, and charts of this sort without limit can be compiled from the various basing-point industries. That, of course, is a certain bonus to the railroads and there have been dire predictions of what would happen in case we did away with this cross hauling. It represents a con-

siderable fraction undoubtedly of the freight receipts of the railroads, but my own conviction is that the basing-point practice is such an incubus upon our whole economic system that if it were removed that the railroads would profit along with other industries.

The CHAIRMAN. This chart, however, demonstrates rather clearly, does it not, that a producer at a given point under the basing-point system is no longer limited to the area which he could serve without the basing-point system.

Professor FETTER. Yes; it shows that.

The CHAIRMAN. In other words, this is a system which tends to make the whole Nation the market for every producer provided he can produce a commodity which is homogeneous with that of the other producers.

Professor FETTER. Yes; and it results in the mill selling a large part of its product at a large distance from the mill, while permitting other sellers to come into that very territory and take away business on which the local mill would be netting a very much larger amount.

Now, that is the most striking fact in the whole situation, showing the noncompetitive character of this. In ordinary competition we'd say at least men fight for their largest profits.

The CHAIRMAN. To my mind the most important question to be answered in any study of this subject is simply whether or not the basing-point system tends to raise the price to the consumer beyond which it would be under the other system.

Professor FETTER. This waste of cross hauling is a waste, even though somebody gets it. The railroads get it and need it. It may not seem a waste from the standpoint of that particular industry.

There are a number of other wastes of various sorts. I will mention some of them. If those things are wastes, they are money expended without any results. Somebody has to pay for it. The industry evidently considers that it doesn't have to pay for it. They would not fight so strenuously to maintain this system unless they thought it was to their advantage; therefore, they think it is to their advantage despite the fact that it involves these wastes which they recognize and deplore. Therefore, who does pay for it? In the end, if it is paid for at all, it must be by the public, by the consumer, by the national economy.

Now, in addition to these wastes of cross hauling—

The CHAIRMAN (interposing). Is there any evidence to indicate that these wastes of cross hauling are sometimes obviated by agreements among producers whereby producer A at Baltimore—is that the lowest city?

Professor FETTER. That happens to be there; yes.

The CHAIRMAN. By which producer A at Baltimore, having received an order from a purchaser in Chicago, instead of shipping the product from his mill, would actually ship it from Chicago, but the purchaser would nevertheless pay for it as though the freight had actually been paid and the charge incurred.

Professor FETTER. I think that all these industries frankly say that when they have more than one mill, when a corporation owns more than one mill, it fills the order that it gets from that mill that will give it the largest mill net.

The CHAIRMAN. In other words, it fills the order from the mill nearest the point of delivery but charges, of course, the price from the basing-point.

Professor FETTER. From the basing-point, wherever that be.

Mr. BALLINGER. Is there any doubt that the basing-point system raises prices to the consumers? Senator O'Mahoney asked you that question. It seems to be very pertinent.

Professor FETTER. Of course, my own belief, my answer, is involved in what I am now saying, that somebody is paying for this, and we have seen in this explanation how the basing-point price is raised. Remember that no matter who sells any particular order of goods, steel or otherwise, no matter how much is realized by the mill who sells it, the consumer always pays the base price plus the actual freight to his destination. The base price is always paid by the consumer. Part of that base price may be wasted by the seller by cross hauling, frittered away, so to speak; it doesn't get into his pocket, but it does come out of the pocket of the consumer in every case; the consumer never buys under this system for less than the base price plus the actual freight.

Mr. FERGUSON. By actual freight you mean from the basing-point. It may not be actual freight at all.

Professor FETTER. He pays the base price plus the freight from the basing-point; that is correct; I thank you.

Mr. FERGUSON. That may not be the actual freight at all.

Professor FETTER. The actual freight is deducted and that may become a loss to the seller.

Mr. BALLINGER. This is a system for eliminating price competition. Doesn't every price-fixing system cost the consumer more than the competitive system or it wouldn't be in existence?

Professor FETTER. I would answer that yes, but I confess to more prejudice than a judgment. I mean on general principles you can't conceive of its being anything else than added cost, although there are, of course, both wastes of competition and wastes of monopoly, both kinds of wastes.

Mr. HINRICHS. Dr. Fetter, in connection with your last answer, you said that you thought it was a matter of prejudice in your answer, and then you went on to say that you couldn't conceive of its being otherwise. Aren't there two questions that are involved here? First of all, there is the question of whether the profit that results from the operation of the system is high or low. Competitive prices with severe overcapacity might be so low as to result in tremendous losses to almost all producing units in the industry. Your base price, your basing-point system, might conceivably be used for nothing more than a minimizing of losses or for the establishment of a relatively low level of return in an industry which under fully competitive conditions would be incapable of earning anything. Your answer is not necessarily concerned with the justice of things. You may quite well disregard the problem of whether the returns received are reasonable or unreasonable, and simply look at the question of, Are prices higher under a basing-point system than they would be under a fully competitive system? Is it conceivable to you that the basing-point system could be established, except as a means of establishing prices which are at least temporarily higher than

they would otherwise be? Is it prejudice to answer that in the affirmative?

Professor FETTER. Well, maybe I went too far leaning backward in saying it was prejudice. As I indicated, that is my own conviction in the matter. If with all of the wastes that there are in this system, and uneconomic operations, the industry still desperately clings to it, it means that it is profitable to that industry, in its opinion; it may be mistaken. When you refer to the wastes of competition there, I wouldn't be able to answer or agree with you or disagree unless I knew just what you meant by the wastes of competition. If you meant by the wastes of competition there this sort of anarchic, cutthroat condition that we were discussing awhile ago, I think that is pretty bad all around, it is bad for the industry, it is bad for the community.

The CHAIRMAN. And yet there are cases, are there not—I gather this from your response to Mr. Ferguson a moment ago—in which the actual freight paid by a producer to transport the commodity to a purchaser is greater than the freight from the basing-point to the destination, so that when the producer deducts the actual freight from the basing-point plus price he actually suffers a loss.

Professor FETTER. Yes; yes, indeed. The two terms that are used so frequently and give such difficulty in really grasping what they mean are phantom freight and freight absorption. Those two things are the two aspects of these discriminatory prices. The phantom freight never occurs excepting in the case of a nonbasing-point mill. A nonbasing-point mill profits by what we call phantom freight, and that means that up to a point that is halfway between the basing-point—you remember we used this as an illustration of a nonbasing-point mill in "Exhibit No. 355"—in selling at any point halfway freightwise toward the basing point, this nonbasing-point mill is receiving phantom freight, to use the popular phrase, receiving freight that is in excess of the actual freight that is being paid.

The CHAIRMAN. Provided that the mill sells on the basing-point system.

Professor FETTER. Yes; that is what we are talking about.

The CHAIRMAN. Though you call it a non-basing-point mill. By what you mean it is a mill which is not located at the basing-point.

Professor FETTER. Yes, Senator; we mean it is in the system.

The CHAIRMAN. Though it may use the device.

Professor FETTER. It is in the system. It is using the device.

The CHAIRMAN. But not at the basing-point.

Professor FETTER. Yes.

Mr. FERGUSON. Instead of being at Chicago it might be at St. Louis.

Professor FETTER. Yes; so that at the moment it reaches this point of equilibrium where the actual freight shipping toward the basing point is in excess of the calculated freight, then this becomes absorbed freight, and when any two basing-point mills are shipping toward each other they are both absorbing freight at the halfway point freightwise, and neither one of the basing-point mills gets this thing called phantom freight.

The CHAIRMAN. Of course, the question which must finally be posed is whether or not these cancel one another.

Professor FETTER. Yes; well, that is really irrelevant, Senator; it is really irrelevant. I think there have been many false comparisons made on that point.

The CHAIRMAN. Let me follow through. Your chart ("Exhibit No. 355") shows a picture with a median point between mill A and the basing point at B, and on the right side of that median point you have a shaded area. I gather from your explanation that if mill A ships to any point to the right of the median point, that is to say if it ships to the shaded portion, it is absorbing freight.

Professor FETTER. Yes.

The CHAIRMAN. That is to say, the actual freight which it pays for the transportation of the commodity is greater than the freight from the basing-point.

Professor FETTER. Yes.

The CHAIRMAN. Therefore, in such case the mill is absorbing the freight and is not getting the benefit of it; it is losing on the basing-point-plus system. If, on the other hand, it shipped to any point to the left of the median point, then it receives the benefit of an excess more than it actually pays. That is where the phantom freight comes into existence. Therefore, the question finally presents itself whether in the administration of this basing-point system throughout the country there are more shipments to the freight absorption area than to the phantom area, or whether there are more to the phantom area than to the absorption area, or whether they cancel one another.

Upon the answer to that question depends certainly the determination as to whether or not the consumer eventually by and large, all taken together, pays a heavier toll as a result of the basing-point system than he would without it.

Professor FETTER. I am sorry to differ with you.

The CHAIRMAN. Of course, that is the question I would like to be informed upon.

Professor FETTER. All of that freight absorption and sending over into the territory of the other, the consumer does not buy for one penny less than he would buy from the local mill. There is a question begging implication in the term "absorption freight." It implies that the seller is giving something to the consumer and giving something to the public. He is not. He is just wasting something.

The CHAIRMAN. Your answer, then, to the question is this, that what the freight absorber loses by shipping to the shaded area is not gained by the consumer, but is gained by some other producer who ships into the unshaded area because the price to all is the same; is that correct? Have I made that clear?

Professor FETTER. I think it is not even gained by the other producer. It is just lost. It is just wasted.

Mr. BURR. Senator, may I—

The CHAIRMAN (interposing). Of course, the actual figure is not gained. I am talking, of course, in by and large. I merely mean that one offsets the other. The loss which the shipper from A into the shaded area suffers by reason of his absorption is offset by the gain which the B shipper in that same area achieves because he charges the basing point plus, is that right?

Professor FETTER. No; because on that sale the other mill is losing the sale. We have assumed that the one mill which is absorbing the

freight is the one that has made the sale. Consequently it has taken away a profitable sale from the other mill.

The CHAIRMAN. That is right.

Professor FETTER. It has taken it away; it has involved a loss to the other mill of its most profitable business; and instead of that we have this mill selling over and realizing less, and there is a mutuality in that when we get the other diagram there which indicates that they are both acting on the same principle.

So they are both proceeding to waste and they are following the uneconomic policy of trading low-profit territory for high-profit territory. Now, that is contrary to the most elementary principles of merchandising. Good merchandising consists in buying in the cheapest and selling in the dearest market, or area, and in this case we find them selling in the cheaper market; the seller selling in the cheaper markets and allowing the other seller to come in and take away his most profitable business. It is a topsy-turvy, irrational process, and they would not follow it if they had found any other way that could escape the antitrust laws successfully, as this has up to date.

Mr. BALLINGER. Senator, when we look at it another way, phantom freight is another dividend the system pays; if you put a basing point at every point of production in the United States the phantom freight would largely disappear except where shipment was made by truck, and you charge the all-rail freight, but even if you had that system you would still have the deadening burden upon the consumer of a fixed price system which, as I was pointing out here a minute ago, wherever you get a fixed price system the assumption is that that is above the competitive level and we have numerous examples to show that any fixed price system is generally above the competitive level because there have been breaks in this system in the steel industry and instantly the price goes down, when some vigorous guy gets going and tries to smash it up a little bit. In numerous other industries we have price fixing; some fellow is off the reservation and, plunk, down go the prices.

The CHAIRMAN. We are not talking of the same thing. I was thinking of A and B producer as both being within the system; were you?

Professor FETTER. Yes; they are both following it.

The CHAIRMAN. They are both following the basing-point system. Well, then do you wish me to understand that you contend that producer B within the system using the basing-point plan is suffering a loss, a great detriment because as a result of that system which he permits, producer A is able to sell in his territory?

Professor FETTER. It is necessary to distinguish between the particular transportation and the whole system. The whole system evidently pays the industry. They are glad to maintain it.

The CHAIRMAN. Yes; because producer B can do the same thing in producer A's territory, so that is it not therefore the fact, which I have been trying very imperfectly to say, that as between these two producers within the system, each selling in the other's territory, the losses which they sustain whenever they pass beyond the median line are balanced one against the other, assuming that they have the same volume?

Professor FETTER. No; they are balanced by the higher base price, if possible, as a result.

Mr. BURR. Base price is put so high, Senator—excuse me just a second—the base price is put so high as to permit every producer to find business attractive in all parts of the country, pretty much.

The CHAIRMAN. That is another phase. We have not been discussing that.

Mr. BURR. When the Senator used the word “loss” in connection with the absorption of more freight than is charged, with regard to any particular piece of business, this seemed to me a little unfortunately lost sight of the fact that, in accordance with the testimony that I read you yesterday, from the Wheeler anti-basing-point committee hearings, the system contemplates the shipment of the goods by all of the producers over hundreds and even thousands of miles and past other producers.

The CHAIRMAN. That is another question. This afternoon we were not discussing the elements which went into the making of the price at the basing point; this discussion was purely one of freight, so that I was not bringing that into consideration at all.

Mr. BURR. Well, the use of the word “loss,” it seemed to me, was a little bit unfortunate there.

The CHAIRMAN. I borrowed that from Professor Fetter, because in response to a question asked by Mr. Ferguson he referred to it as a loss.

Mr. BURR. This business of absorbing more freight than they charge does not mean a loss, because the base price is put up so high that that business is still attractive, although they get less than their base price in their net return.

Mr. FRANK. There may be a loss in the economic sense; that is to say, there may be unnecessary shipments, which means an economic loss to the community.

Mr. BURR. I thought the context meant a loss on that shipment, and there is not any loss if the base price is put sufficiently high that that business is attractive, and if it were not attractive they would decline to bid for that particular job, so it must be attractive and there must be generally a gain, even though they are absorbing more than they charge in the way of freight factor.

The CHAIRMAN. May I interrupt?

Mr. BURR. Excuse me, I am interrupting.

The CHAIRMAN. That is all right. The proceeding at this time, I am advised, is at the point where several members of the committee, Professor Fetter, would like to address a large number of questions to you, so many that it is impossible to cover them tonight, and at the same time afford the opportunity to present here this afternoon some material which it was understood Mr. Burr was to offer to the committee today, so if you will be good enough to return in the morning at 10 o'clock, I will turn you over to the tender mercies of these other inquisitors here.

Professor FETTER. I am at their service for a Roman holiday.

The CHAIRMAN. I rather imagine you will have the holiday.

ECONOMIC CONSEQUENCES OF BASING-POINT SYSTEM

Mr. BALLINGER. We have a document which we wish to introduce in the record. This document, Senator, was prepared by the staff of the Federal Trade Commission and is an exposition in as simple language as we have ever seen it put before, of the basing-point system and its economic consequences on the system we call capitalism. Now, we have this document ready for the record, and it has been suggested that perhaps we might read just parts of it, or, if the committee does not want to hear parts, we will just offer it for the record and close, but the press is waiting for it now.

The CHAIRMAN. If Mr. Burr will take about 15 minutes.

TESTIMONY OF EUGENE W. BURR, ATTORNEY, FEDERAL TRADE COMMISSION—Resumed

Mr. BURR. I think this might be printed in full.

The CHAIRMAN. If the Federal Trade Commission makes that request.

Mr. BURR. I am not the Federal Trade Commission and cannot speak except for myself.

The CHAIRMAN. I am putting it up to the Commission. It may be accepted on that understanding, that Mr. Burr will present as much of it as possible this evening and it will be all printed in the record.

(The document referred to, Monopoly and Competition in Steel, was marked "Exhibit No. 358" and is included in the appendix on p. 2192.)

Mr. BURR. If the committee please, I shall start on page 7 of this document, prepared by the staff of the Federal Trade Commission, as follows:

'The fixed-price system in steel sometimes slips momentarily, as it did in June 1938. When the momentary "competition" is cured and peace once more hovers over the industry, competitive practices still crawl here and there under the surface. But such vestigial remnants of competition are not enough to restore a healthy condition—

I shall skip from time to time—

It is recognized that the industry will naturally fear the adjustments necessary for the establishment of healthy competition. The Commission notes in the published hearings of the subcommittee of the Senate Committee on the Judiciary on S. 10 and S. 3072, March 10, 1936, the following statement in a letter from the late Mr. John Treanor, of the Riverside Cement Corporation, to Mr. B. H. Rader, of the Cement Institute. Although speaking of the cement industry, Mr. Treanor expresses a fear of competition that is common to other industries as well. He says:

"Do you think any of the arguments for the basing-point system which we have thus far advanced will arouse anything but derision in and out of the Government? They amount to this, that we price this way in order to discourage monopolistic practices and to preserve free competition, etc. This is sheer bunk and hypocrisy. The truth is, of course, that ours is an industry above all others that cannot stand free competition and that must systematically restrain competition or be ruined. We sell in a buyer's market all the time."

In steel, as the Commission has observed, the normal and wholesome elimination of obsolete plants has not taken place. The industry has become addicted to monopoly as to a habit-forming drug. Its members fear nameless horrors if the drug should be withdrawn. Despite these fears, it remains true that a cure is necessary if the steel industry, together with American business in general, is to be restored to health.

To some extent the steel industry has eliminated obsolete plants, following the process of merger, the choice of plants to be closed being made arbitrarily by those in control of the merger. The Commission calls attention to the fact that here, on a private scale, we see the substitution of arbitrary decision for the impersonal decisions of the free market in an important industry. But the philosophy of the competitive theory which underlies capitalism is that natural death in industry, under the forces of fair competition, is more merciful than death by fiat, and also more clearly in accord with the public interest. It is fair and reasonable that the best man should win, and that the loser should be obliged to hunt for some other source of income. But it is offensive to peace and good morals that a man should be driven out of business by financial power, whether his throat is cut in a sudden attack or whether he is captured first and killed later.

Then it goes on to say that fiat, finally, if it is indulged in, will become the function of government.

The Commission points out that the drift toward monopoly involves the disquieting prospect that decisions, once the product of an impersonal economic necessity, may become the function of private or public dictators under conditions that offer the victims no avenue of escape. * * *

The consumer is burdened with monopoly costs of steel multiplied several fold. Unless and until this vicious circle of scarcity and unemployment can be broken, it is clear that it will act to grip the business world in paralysis. * * * There appears to be only one way in which the circle of high prices, low production, and unemployment can be broken. That is through the restoration of price competition in accord with the ancient rule of capitalism, that at a low rate of production an industry ought to be losing money. The alternative is the abandonment of capitalism and experimentation with authoritarian controls.

Capitalistic theory has always held that industry was expected to produce in the hope of profit, not that it was expected to stand idle at a profit. If the rewards of full-time industrial production are to be given equally for half-time work it is inevitable that labor and agriculture must also be supported on a half-time basis.

The Commission is not impressed with the argument that as steel output falls off and costs rise, it is necessary or desirable to maintain prices in an effort to break even. Such an argument violates the fundamental principles of capitalism. On the contrary, it is necessary and desirable to reduce prices in a falling market in an effort to increase tonnage and cut costs.

If free competition is not restored, the alternative will be public control of the details of business policy, including prices, wages, and production schedules. If private monopoly is permitted to spread through the greater part of the business system, public control appears to be unavoidable.

The Commission calls attention to the sequence of events in countries where the cartel form of monopoly has been encouraged. Centralization of powers is the forerunner of a State, in which business, both small and large, is entirely subject to the direction of the government. * * *

Freedom depends on preserving a wide field of opportunity for free initiative. Universal price controls constitute a repudiation of economic freedom and a demand for some form of authoritarian government.

The CHAIRMAN. Is there any possibility of dispute about the conclusion which you have just stated, namely, that the inevitable end of private monopoly is some sort of authoritarian state?

Mr. BURR. I do not believe there is any dispute, Senator, but I want to say this: That I don't believe that business understands that changes in our political and economic institutions, or I should say economic and political institutions, are made as the result of trends which are pursued over a period of years and that when you have em-

barked on a certain program those trends begin operating, go on operating constantly, and that the results are then effected before the body of the business world and the body of the voting world understands that they have been pursuing that trend. That trend was begun back probably 25 years ago.

The CHAIRMAN. There isn't any question that the great majority of businessmen are absolutely devoted to the democratic system of government.

Mr. BURR. Lip service only, sir.

The CHAIRMAN. No, no, no, no!

Mr. BURR. They don't live up to their doctrines.

The CHAIRMAN. Don't say that. I am stating quite the reverse, that a great majority of the people of this country, whether they are in professions or in business, are absolutely devoted to democratic ideal, but business leaders who cooperate in making possible monopolistic practices are apparently oblivious of the fact that the economic policy which they pursue is the deadly foe of democracy.

Mr. BURR. When I said "lip service only" I went a little too far; I went too far to this extent, and to this extent only, that they are devoted, I agree with you, to the principles but they don't practice those principles because they are pursuing lines of conduct which are inconsistent with them, and I could easily quote to you from Dr. Herman Oliphant, formerly of your committee, and now deceased, to the effect that the foes of our present economic and political system are most probably those very men who regard themselves as devoted to the competitive system but are pursuing policies which are inconsistent with them.

Have I answered the question satisfactorily, Senator.

The CHAIRMAN. For the present.

Mr. BURR. The Commission denies the necessity for such an outcome in the case of steel.

That is to say, the necessity for the removal of steel from the privileges of free capitalistic management and placing them under Government control.

The Commission—
the report says—

denies the necessity for such an outcome in the case of steel. We believe that to socialize the iron and steel industry, probably the leader of American business, would be a dangerous precedent. Such an example might easily spread far through the business world, tending to the break-down of private enterprise and the rise of an authoritarian state.

The Commission therefore suggests that the steel industry, which it believes to be capable of reasonably efficient operation without monopoly, should be definitely separated in public policy from the "natural" monopolies and treated as a free enterprise. As a free enterprise it should be given an effective protection that will positively assure it of continuous, sound, and wholesome competition. The larger the area of business in which fair competition can be assured, the wider the margin of safety against the loss of both economic and political freedom.

The prevention of identical delivered prices for steel is, in the Commission's opinion, necessary for the restoration of competitive conditions. This involves the necessity for the elimination of the basing point system, since the purpose and effect of that system is to prevent price competition. It will also be necessary to prohibit any variation or substitute for the basing-point system, the effect of which is to establish identical delivered prices.

The fact that sound conditions can be restored only with considerable trouble and expense is not a sufficient reason for doing nothing, nor for adopting irritating but ineffective half measures. The capitalist system of free initiative is not immortal, but is capable of dying and of dragging down with it the system of democratic government. Monopoly constitutes the death of capitalism and the genesis of authoritarian government.

The steel industry is a focal center of a monopolistic infection which, if not eradicated, may well cause the death of free capitalistic industry in the United States. This Commission is invested by law with the duty of assisting in the protection of competitive capitalism and in its restoration to health. Whatever such protection may cost, we believe it will be less costly to capitalism and to freedom than any alternative.

Thank you very much, Mr. Chairman.

The CHAIRMAN. Have you completed?

Mr. BURR. Yes, sir; I have completed the excerpts that I now have occasion to read. I am through unless there are some questions.

The CHAIRMAN. My understanding is that the paper from which you have been reading is to be incorporated in full in the record as a Federal Trade Commission document.¹

Mr. BURR. Yes, sir; and it is so entitled as submitted by the Federal Trade Commission.

The CHAIRMAN. And sponsored by the Federal Trade Commission?

Mr. BURR. Yes, sir; indeed, it is.

The CHAIRMAN. Are there any questions to be asked at this time of Mr. Burr?

If not, the committee will stand in recess until tomorrow morning at 10 o'clock.

(Whereupon, at 4:25 p. m., a recess was taken until Wednesday, March 8, 1939, at 10 a. m.)

¹ Introduced as "Exhibit No. 358," *supra*, p. 1947.

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

WEDNESDAY, MARCH 8, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:15 a. m., pursuant to adjournment on Tuesday, March 7, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senators O'Mahoney (chairman) and King; Representative Reece; Messrs. Henderson, Ferguson, O'Connell, Frank, Davis, Hinrichs, and Ernest Tupper representing Department of Commerce.

Present also: Federal Trade Commissioners William A. Ayres and Charles H. March; Willis J. Ballinger, director of studies and economic adviser to Federal Trade Commission; Eugene W. Burr, attorney, Federal Trade Commission.

The CHAIRMAN. The committee will please come to order. Mr. Ballinger, are you ready now to proceed?

Mr. BALLINGER. Yes, sir; I am.

The CHAIRMAN. Professor Fetter.

TESTIMONY OF FRANK A. FETTER, RETIRED PROFESSOR OF ECONOMICS, PRINCETON, N. J.—Resumed

Professor FETTER. There were a number of other formal things on the outline that I had planned, but we got into the questioning, and I think I have perhaps taken all the time that I should in my more formal discussion, and I am here, I understand, subject to questioning.

The CHAIRMAN. I see.

ECONOMIC PROBLEMS CONFRONTING THE COMMITTEE

Mr. FRANK. Professor Fetter, I want to ask several questions; but before I do so I want to make clear my purpose.

I take it that one of the major problems confronting the committee is this: In order to help our economy we want, in part, as it is put, "to aid the consumer." To do so many people want, in part, to procure larger and larger production of goods at increasingly lower prices with as even a flow of increased production and of reduction in prices as is possible, so as to add to mass purchasing power, add to employment and to our prosperity.

Now, in approaching that problem throughout the discussion the last several days, four words have been used which seem to me to be somewhat vague. Particularly were those words used in the

pamphlet or memorandum that was read into the record yesterday: The words were "competition," "monopoly," "Government policing," and "Government regulation." You spoke yesterday of diagnosis and cure, and I should like to develop that analogy. What I want to bring out by way of that analogy is that medicine has advanced to the extent that it has based diagnoses on ever-increasing study of facts, to the extent that it has become more careful and more precise and more detailed in its analysis and diagnosis. The more one learns about the human body the more complicated and detailed are the facts; but the more knowledge is increased—with the resultant rejection of oversimplified analysis and blanket words and vague categories previously used by physicians—the more diseases are prevented and the more cases are cured.

For instance, malaria was once supposed to be due to damp night air; now we know it comes from mosquitoes that come out in the damp night air. As a result of that more careful analysis, fewer people contract malaria. There is a story I read in a book recently of how Louis XIV was sick for several weeks with fever. His physicians could do nothing. In the fourth week someone gave him antimony and soon the fever broke. Antimony thus became a very popular cure. Now today we know that he was probably ill with typhoid fever, which usually breaks in the fourth week, and that the antimony had nothing whatsoever to do with the apparent cure.

There are hundreds of such instances in medicine, where detailed analysis leads to better diagnosis and thus to better health. For that reason I want by questioning to get your help in trying to examine the body politic and therefore to subdivide the general terms "competition," "monopoly," "government policing," "regulation," and to bring out that perhaps, by using those terms without nicer analysis, we may be oversimplifying the problem and may diagnose economic maladies crudely and inadequately.

With that by way of introduction I want to ask several questions. Much has been made in the discussions here of the social waste and economic losses to the community, resulting from monopoly. I would like to explore with you the question whether competition does not also at times lead to great economic and social waste. For instance, if there is complete competition in the building of office buildings, we may have a great excess of office buildings with the consequence that many people are injured; the investors are injured, workers are thrown out of work, business activity is reduced. And so with excess plant capacity in many industries; if you have complete unregulated, uncontrolled competition, frequently you would have, as a result of some sudden demand which later abates, a development of a large amount of excess plant capacity with subsequent loss to a great many people, and great social waste.

Now I want to inquire whether it can be said dogmatically that competition necessarily brings about less waste than monopoly.

Professor FETTER. You ask me to speak dogmatically and, speaking that way, I would say certainly it does lead to less waste than monopoly.

Mr. FRANK. What I am trying to get at in all the questions I am going to ask is this: Don't we need, particularly in this time of economic difficulty, to examine with great care the particular facts in

particular areas of industry, and to base our judgments on precise facts rather than on vague generalizations? One wide generalization that I, for one, would agree with would be that there is a strong presumption in favor of the value of competition.

Professor FETTER. That was the effect of my answer; yes.

Mr. FRANK. But it would seem to me that is not an irrebuttable presumption, and that there always ought to be room for rebutting that presumption in respect to any one or more of our numerous complicated industries; and that therefore, rather than rely on general rubrics, what we need to do, if we are going to meet our problems intelligently, is to discuss specific situations, and ascertain the facts with respect to them, and then determine whether the presumption with respect to any given industry—the presumption in favor of competition—has been rebutted or could be rebutted, and to ask further, if we find monopolistic conditions, whether, rather than seeking to eliminate those conditions, we shouldn't try to make the monopoly, or monopolistic condition, more socially useful; and whether our economy would not be bettered by doing that than by seeking in some means to procure a complete restoration in all industries of what we call competition?

Professor FETTER. Up to the last two or three sentences I was in complete agreement with you. I thought it was an excellent statement of what I would like to say myself, but there are certain implications in the latter part of your statement that I hesitate about.

The realistic study of industry is essential as you outlined it, and it is a sort of pragmatic study that we have to make, and in certain industries we find that monopoly is so deep-seated and inevitable that we have to accept it. But I call attention to this fact, that in regard to public utilities it is often assumed that we have deliberately created the monopoly in order to regulate it. On the contrary, we have found that certain industries are of such a nature that after long experimenting with competition, we find that the acts that we call competitive are really instruments of monopoly. It is not truly competition. I think that a good deal of our confusion in the matter consists in condemning competition because of certain results that are really monopolistic methods.

The CHAIRMAN. Before this can be made intelligible, the discussion between Commissioner Frank and the witness, it seems to me that one should find just what each of you means by the phrase "socially wasteful." What are the social objectives that the Commissioner has in mind which ought to be obtained? What are the social objectives of which you are thinking? I can conceive, for example, that the fundamental objective of government and economics ought to be the maintenance of a social order in which the masses of the population can obtain the largest amount of prosperity and liberty and the right to secure their own happiness in their own way. I can also conceive that monopoly may very readily result in producing a most efficient machine for the production of certain commodities, but that as a result, the human values are frequently utterly lost sight of and become the waste. Now do I make my point clear?

Mr. FRANK. I quite agree with you that among the vague terms we ought to define are "social waste" and "social value," Senator; and perhaps as I go on with these questions those nicer definitions can

be developed. I was, for the moment, using those terms in the sense in which they were used yesterday, that is to say, much was made—and I think with propriety—of economic losses due to cross-shipments. It was said that there were unnecessary expenditures for transportation.

It is in that sense, for the moment, that I want to discuss the question of social losses. I want to address myself primarily at this moment to waste of materials and labor; and in that sense I am using the word "waste."

Now, to take up the subject of public utilities, I quite agree with Professor Fetter that we have not deliberately created the situation which we describe by those words. It has been a result of evolution and of determining what seemed to be desirable.

(Senator King assumed the Chair.)

Mr. FRANK (continuing). I take it, however, that the words "public utility" which commonly now are taken to mean an industry regulated in a peculiar way, do not mean that from the point of view of more precise analysis. They mean, rather, merely this: That you have an industry in which experience has indicated that it is undesirable to have a large number of competitors, or any competitors; and I would prefer to limit the term in that way for this reason:

We have dealt with those industries which we call "public utilities" by a particular kind of governmental mechanism that we call "regulation." That again is a word that seems to me to require a severe analysis. We have chosen one way; it may have proved to be a very inept way. I think it has been demonstrated that (certainly with all the metaphysic's involved in the rate-base concept) we have stymied ourselves to a considerable extent and have lost sight of what we really were trying to accomplish.

It doesn't seem to me that the word "regulation" necessarily means that traditional method of dealing with industries we have heretofore called "public utilities." Or, to put it differently, it may be that we ought to abandon the word "regulation" and that, instead we ought to say, as you indicated yesterday, merely that, where monopolies exist and are recognized as lawful or are acquiesced in, then certain obligations should attach to the ownership of the monopoly.

In our public-utility regulations through public-service commissions, and the like, we have attempted to attach certain of those obligations in a particular way. Maybe we need a total reexamination of the adequacy of that method. Maybe the traditional kind of "public-utility regulation" ought to be severely modified. And surely the same type of approach to the attaching of obligations to monopolistic conditions ought not to be uniformly applied to all industries.

For instance, today we say we are "regulating" the stock exchanges. Well, the method of "regulating" them is not at all the same as the public-service commission employs with respect to electric power companies. We are about to experiment with a kind of cooperative regulation in the S. E. C. of the over-the-counter market. It doesn't look at all like "public-utility" regulation.

It seems to me, therefore, that there was an oversimplification in the suggestion¹ made in the memorandum¹ yesterday that the only

¹ "Exhibit No. 355," appendix, p. 2192.

alternatives confronting us are these: Competition or monopoly or regulation of the type heretofore employed, policing, or Government ownership. Now all of those concepts, it seems to me, have shadings.

Human ingenuity is still open, I hope. And it doesn't seem to me that in facing new and serious problems we need to rely solely upon mechanisms and contrivances heretofore invented, regardless of their proved partial inadequacy.

Now, bearing that in mind, I just want to suggest this: That the category of those industries which today we call "public utilities"—the category of industries where monopoly may be more desirable than competition—is not necessarily a closed one.

It may be that, upon examination, we will find several industries where the waste, the injury to the economy of having something like what in telephony would be four telephone companies in a given city, will prove to be undesirable and that, having ascertained that it is, then we will decide that we need to do something about it.

Then we will need to use our ingenuity to determine what should be done. And I don't think we are obliged to fall back upon the analyses made yesterday that the only conceivable way of acting is by Government encroachment upon the activities of industry in the particular form we have used heretofore.

I talked to an important industrialist but a week ago who felt that his industry has virtually come to that point. His is not the only business unit in the industry, but the number of units in this industry is small and he recognizes that what, to use high-brow terminology, is called "monopolistic competition" prevails in that industry, and that the old-fashioned type of competition is gone. He feels, as a consequence, that, that industry is deeply affected with a public interest, and he feels that the appropriate method of dealing with it would be by consultative cooperation with Government—consultation in which there would appear not only the units in the industry but representatives of consumers, of labor, and, I would add, most importantly of other industries, those industries which buy the materials and those industries which sell the materials to that industry. So that, as he envisioned it, the various agencies of Government—with respect to his industry I think he named six—might well sit down with numerous persons in and out of the industry and determine what would be in the interest of the general welfare of increasing production, of increasing employment, of bringing prices down to a reasonable extent, of preventing exorbitant profits and so on.

Now, that isn't the type of public-utility regulation that we have had heretofore. Nor, on the other hand, does it mean the iron hand of Government asserting itself in a masterful way leading—as yesterday's memo¹ put it—to the authoritarian state. Nobody could abhor more than I do the notion of the authoritarian state. It is repugnant to everything that we hold dear in America. But it seems to me that democracy does not necessarily involve the use of competition at all points, that there is no indelible and indissoluble association of democracy and free-for-all competition in all industries. Particularly where an industry involves a large amount of fixed capital with high fixed costs, one must recognize that, by the very nature of those

¹ "Exhibit No. 358," appendix, p. 2192.

facts, there cannot be the same kind of competition that there is between farmers. When we use the word "competition" as applied to that kind of industry we can't conceivably mean what we mean when we talk about competition between farmers, no one of whom has a sufficient amount of the supply so that the price he asks can affect the market price.

Don't you agree, therefore, that analysis of the terms used in yesterday's memo or customarily used in the kind of economic treatises that you were criticizing yesterday, shows that those terms are oversimplified and that, if we are going to meet the complicated problems of a highly complicated economy such as ours, we need to use nicer tools, that we oughtn't, so to speak, to operate on the body politic with rusty or antiquated surgical instruments?

Professor FETTER. Again I agree with almost everything you say up to the last few sentences. It is always dangerous to give a formal definition of anything, you know; it means getting out on a limb. But I will venture a definition that I think is in entire accord with your conception of what a public utility is: A hopeless monopoly in private hands. That is what we have found certain industries to be. I think there is something technological back of that, too; I don't think that that is a mere chance, but that is what finally decided society or impelled society to take the solution of commission control, and we call them quasi-private industries and quasi-public industries. We mean that the moment that we have taken that step we have recognized that they are not quite the same as ordinary, average private property.

Mr. FRANK. I quite agree with you. I think it would help our thinking on the subject of the possible extension of the category of such industries if we could drop the use of the words "public utility," for, unfortunately, that phrase has now associated with it a certain kind of so-called "regulation." It might help our thinking if we could invent some new word—I don't know what the word would be; for lack of a better one we might call it "ugwug"—something that has no emotional connotations, no past history attached to it and therefore doesn't call to mind all the apparatus of our present and, I think, largely inadequate method of dealing with those industries which are now in that category. Supposing we just drop the words "public utility" and say instead, if I am not allowed to use "ugwug"—

Acting Chairman KING. What about "mugwump"?

Mr. FRANK. That has already been preempted.

Acting Chairman KING. That passed out of the picture with the death of Mr. Cleveland.

Mr. FRANK. I still have a few friends who are in that category.

It seems to me—to use a lot of words for the moment—it would be better if we said "an industry in which because of technological considerations, competition"—at least, full competition of the kind that the classical economist lauded—"is no longer socially desirable."

Now you can call that X or, if you want to use my word, "ugwug," and say, "Let's sit down and figure what is the best way to deal with that 'ugwug.'" It may be that, in different industries, we would find different solutions.

The human mind always tends to oversimplify; and we like to think that if we have found a solution for one problem it will do for

all others, or if we see two situations looking somewhat alike, that they must be in all respects alike. I submit that we ought not to close our minds in that way. Painful as the process is, we ought to try to avoid oversimplification where oversimplification is likely to lead us into false diagnoses.

I suggest that what this committee badly needs to do is, either itself or through someone else, to make analyses or spot-checks of several industries and determine whether the presumption in favor of the old type of competition has, in those industries, been overcome by the technological situation, and, if so, what particular kinds of apparatus we want to use to make those several industries function in a socially desirable way.

Professor FETTER. I think that would be a highly desirable thing for the committee to undertake, and, among the oversimplifications of terms, I would suggest that public utility itself is one.

Mr. FRANK. Indeed it is.

Professor FETTER. We are likely in our thinking to conceive of public utilities as all white, we will say, and private industry as all black, or vice versa, without gradations of gray in between.

Mr. FRANK. Exactly.

Professor FETTER. Now I incline to the thought that I am sure you are sympathetic with because we have spoken of it somewhat, I mentioned the other day the possible desirability of reviving the conception of common employments.

Mr. FRANK. Indeed; I think it would be highly desirable.

Professor FETTER. The common employment was an old common-law conception that treated all dealers in food, tailors, millers, brokers, and a number of other industries that held themselves out to deal with the general public, something along the line of what we call public utilities today. They recognized if a man set up in business not just to work for himself and his family and friends, but offering his services generally, that he should deal with that public fairly and openly and not with discrimination. Then later, as you know, of course, better than I, that law was changed and we have now the provision that everyone has a right to choose his own customers.

Acting Chairman KING. Would you expand the definition announced by the Supreme Court of the United States in the famous case of *Munn*, in Illinois, in relation to grist mills and companies that control for public use the flour and grain and so on, of what was a public interest or public use and impress upon the tailors, to whom you have referred, and those engaged in what might be denominated individual activities, the concept that they are in the public interest, or impressed with a public use or public trust and public interest, and therefore must be regulated?

Professor FETTER. Yes, Senator, I think along the line of Commissioner Frank's criticism we have assumed that a thing was either a hundred percent public utility or not a public utility at all. There are gradations, and the privilege of doing business is in a sense a public privilege. In a certain sense, everyone who is engaged in public business is exercising a kind of franchise.

Acting Chairman KING. Would the farmer come within that classification?

Professor FETTER. Yes. The privilege of citizenship is a very great privilege.

Mr. FRANK. But, Professor Fetter, I think, just to avoid misunderstanding with Senator King, you would agree, as I know I would, that there are large realms of activity in the country today where good old-fashioned competition is desirable and that with respect to them the notion of "common calling" ought not to be applied at all, or with any rigor, and that what you and I are more interested in are those industries where, due to technological change, and the like, the element of old-fashioned competition proves, upon analysis, to be less desirable; that what we want, in those instances, is more of what we call monopoly and less competition. And, as you say, there may be shadings from full competition on the one end to full monopoly and exclusive franchises on the other. So, instead of saying that, on the one hand, you have private business, like farming, or, on the other hand, public utilities, like telephone companies, you may have all sorts of intermediate grades. And, at some points in that economic spectrum, the obligations you may want to have attached to the right to do business may be relatively small, approaching zero, or very rigorous, as in the case of the company having an exclusive franchise granted by the Government. Wouldn't you accept that analysis?

Professor FETTER. I think I could. We may agree quite fully with another person with regard to general diagnosis of a situation and yet our conclusions are inevitably influenced by our general social philosophy that we have in the back of our heads, and I suppose, if I am conscious of any prejudice there, it is that general democratic sentiment that Senator O'Mahoney has mentioned. My prejudice would always be in favor of finding a solution that leaves the maximum of individual liberty, of individual initiative, and individual expression. But where we find that that will not work we have to find some other way.

Mr. BALLINGER. May I ask you a question, Commissioner Frank? From your remark here I am getting an inference which I would like to clear up. Are you suggesting that there may be a form of State regulation of monopoly which is less drastic than the present public-utility regulation of monopolies, and if so, I just want to clear that up. Are you suggesting we could make monopolies serviceable and useful by having the Government keep pretty far out of the picture, or are you willing to agree that if you are going to have these monopolies you have got to have drastic Government regulation of them?

Mr. FRANK. No; I don't agree with your last statement, and it will take me a moment to explain myself. I thought I had; apparently I didn't; apparently I was not adequately articulate. It seems to me another word it would be well worth dropping would be "regulation." We might better invent a new word and call it "agwag." What we need to do is to have a new approach to the problem of varying degrees of monopoly, as Professor Fetter has indicated. Then the intensity of the "agwag" will have to vary with the particular industry and with the degree of, let's say, the "monopoly" that exists.

I suggest that far more can be done by intelligent cooperation between Government, the components of the industry, the suppliers of

the materials, the purchasers of the materials, labor, and the consumer, than we have anywhere as yet canvassed.

Let me say at once that in suggesting that I am not advocating that we use the device that was used in N. R. A. I mean to say that I think that, unfortunately, the pressure of forces that converged during those times, due to the emergency condition and the necessity for great haste, led frequently to the adoption of devices which went exactly in the wrong direction—not always, but sometimes—of reducing production and increasing or keeping up prices when they should have been reduced.

My notion of "agwag" is to deal with those industries so as to get the maximum efficiency, the largest possible amount of production that can be obtained on a profitable basis, with the lowest possible prices, with the best wages that the industry can pay—in other words to move toward a developing, expanding economy of the kind that this country, of all countries in the world, can afford. And it seems to me that we must face the fact that much as I agree with you that, in as large an area as possible, we should have good old-fashioned democratic competition, there are now areas in industry where, due to technological changes, that is no longer possible and therefore where, if you are going to get the end results supposed to be achieved by competition, you must use new devices.

I think people sometimes confuse two things, competition as a means of doing business, as a way of doing business, and the results which competition would produce if it were working at its ideal best.

In those industries where competition as a method must in whole or in part be out, it seems to me that our energy should be devoted and our intelligence directed—and heaven knows we have enough intelligence in these United States to solve that problem—to this end: that we will get as good results out of those industries as would have been procured if ideal, classical competition could still be operative in those industries, and perhaps, in many industries, without nearly as much waste as the old-fashioned competition frequently involved.

Mr. BALLINGER. Commissioner, do you think that you can protect the public interest by cooperation between Government and business where there is no law which says what is just and what is fair? In other words, in this matter of profit, do you think that a government dealing with a private monopoly could by cooperating work out a low price for goods and a fair rate of return on the investment? That has to be determined by law, by drastic regulation. Take the closing up of inefficient plants and things of that kind. Do you think cooperation can bring that about?

Mr. FRANK. Well, the word "cooperation" is another word that need analysis. Perhaps we oughtn't to use it. Maybe we will have to make another word and call it "wiffwaff."

It seems to me that what we need to do is to canvass the possibilities of working, in some industries, with a minimum of the kind of drastic, iron-handed governmental imposition that the word "regulation" connotes and see whether we cannot work, perhaps with some modicum of law—with a greater quantity of legal apparatus in some industries and less in others—to get the desired end. Let me illustrate what I mean.

It seems to me that in some industries, of an integrated character, if all the units of the industry could confer with one another and with the Government and with the producers of the raw materials (if there be any, if it isn't a raw-material industry or doesn't do its own extracting) with the persons who buy the product, with labor, and with ultimate consumers, and ascertain in a given year what an intelligent price and production schedule would be; in other words, try to ascertain by canvassing the entire situation, by procuring adequate information, of the kind that unfortunately we have too little of, just how much of the product by means of a given reduction of prices could and would be absorbed by the ultimate consumer.

It seems to me that it is worth while experimenting with such devices in some industries. It may be that in others that would be a hopeless undertaking; it may be one could know in advance that there would be recalcitrant persons in that industry who would not yield to intelligent discussion or persons who would feel that they would procure some selfish advantage from purporting to cooperate and not in fact cooperating. But we have done too little experimenting; we have closed our minds by fixed categories of what we call "regulation." And I, for one, am not prepared to say that the most drastic kind of governmental control is always the only alternative to old-fashioned competition.

Professor FETTER. I am sure that the Commissioner has heard, as we all have, some disquieting rumors that there are still those who would like to revive N. R. A., and such suggestions I venture will come before this committee. I am glad to hear that he is opposed to that quite as strongly as some of the rest of us are.

As regards the matter of the term "regulation" I am inclined to think that I would rather still try to deal with that rather than with "agwag." The term has very respectable associations, and I confess myself, along with a great many others here, probably Commissioner Frank also would be in that number, as having been largely influenced by the thinking of Justice Brandeis. He made this distinction years ago between regulated competition which stayed outside the business and didn't try to tell people how to run their business but laid down general rules of commerce and traffic and on the other hand control, even as far as public-utility control. There is a stopping place, and when you deal with regulated competition in this sense of simply laying down rules of commerce which must be obeyed, but which do not go inside the business and tell people how to run their private affairs, you have the choice of varieties; in some cases very mild measures might be sufficient and in other cases more drastic measures might be necessary.

Mr. FRANK. And that the variation ought to depend upon a study of facts in each particular case.

Mr. Henderson has just suggested that I bring out the fact that adequate information on many of the subjects we are discussing is not today available; that, for instance, such price data as the Government assembles is procured solely on a hit-or-miss, voluntary basis; that the Federal Trade Commission, for instance, has never been given enough power and funds and staff to do the kind of work of assembling the information upon which adequate remedial devices should be based.

May I change the subject, Professor Fetter? Yesterday in the pamphlet that was put into the record¹ it was said in speaking of the virtues of competition: "It is fair and reasonable that the best man should win and that the loser should be obligated to hunt for some other source of income?"

I should like to inquire into that statement. I want to find out whether it is necessarily "the best man" who always wins. For instance, if manufacturer Jones has his plant in State A where there are laws requiring decent labor standards and his competitor Smith is in State B where there are no, or virtually no, labor standards imposed by law so that Smith can undersell Jones and put him out of business, is Smith, therefore, the best man?

Professor FETTER. I am not the official interpreter of the paper to which you refer, but as I listened to it I took it that all those statements were made on the assumption that we were dealing with a condition of fair and free competition and you bring in there quite another problem—this problem of interstate differences.

Mr. FRANK. Which is very important, is it not?

Professor FETTER. It is important, it is true, but that was not as I took it an implication of that general statement that you are referring to.

Mr. FRANK. I was not criticizing the statement, Professor Fetter. I was simply pursuing the tactics which I have heretofore endeavored to pursue, of trying to get a nicer edge on the implements of analysis. And so here again what I wanted to bring out was that competition, even in those industries where it is desirable, may need to have certain injections of governmental standards; that where government in one State allows business operations to go on with no control of labor standards and a person operating in another State has such standards imposed upon him, you may have competition which may be very unfair.

Professor FETTER. The modifying conditions are very much broader than those you suggest. For example, they include the whole matter of unfair competition which may be intrastate as well as interstate, and the Federal Trade Commission is the special agency that was organized in order to deal with that, and I would take it, listening to any statement that they made, I would assume that as implying that it was competition of the fair variety, and they would not make that sweeping assertion about the best man winning if all sorts of unfair competition were rampant. So I think we are not differing on that.

Mr. FRANK. I was sure we were not.

Acting Chairman KING. I might suggest that climatic conditions have very much to do with the wage conditions, and the price of commodities which are purchased for the purpose of constructing your machines or for the purpose of continuing your operations. Then, too, the importation from abroad and our contacts with other nations have much to do in determining prices and in determining enterprises which are carried on in the United States.

We have competition in a way from the importation from Canada and from abroad, and they have more or less competition from our exports to their State, and yet we would not want to raise any barriers that would destroy the relations between our countries and

¹ "Exhibit No. 358," appendix, p. 2192 at 2196.

other countries in a commercial sense, so in determining prices, the better man, and so forth, there are other factors than the wage scale. There are other things that are to be determined in addition to wages.

Professor FETTER. We might well recall the old generalization, "Every generalization is false, including this one."

Mr. HINRICHs. Professor Fetter, I would like to discuss not unfair competition, but the meaning of fair competition as the economist ordinarily understands the term. If I can be pardoned for just a moment, I would like to say from the point of view of the record that the questions which I have been asking, and am asking today, are not intended in the least to indicate a belief either that steel prices as they stand today are competitive, or that lower steel prices wouldn't be desirable. I would like also to take this chance to say that I think you have made a masterly exposition and have been remarkably honest in your criticism of the limitations that attach to your analysis.

Like Commissioner Frank, however, I am concerned with the complexities of the operations of an individual business operation, or of an industry, and, consequently of the difficulty of an attempt to find a relatively rigid formula that can be applied to business operations.

Now, coming to this question of competition, your chart yesterday that you introduced as "Exhibit No. 351" shows certain things. On the right-hand side of that chart there is an area called Competitive Market B, and inside that market, if I see it correctly from here, you have located approximately seven plants. Those plants are selling on the basis of a price of \$1 delivered in that market. Now, in the first place, those plants presumably have very different costs of production. That would be correct, would it not? There might very well be a range there in costs from let us say 75 cents a unit to costs of more than \$1 a unit.

Professor FETTER. You mean as between the separate—

Mr. HINRICHs (interposing). That is between the individual plants, they would be selling at a common price of \$1, and yet they would have very differing costs, some plants highly profitable because of their efficiency, other plants unprofitable, barely covering their out-of-pocket direct costs.

Professor FETTER. I think it is unlikely that all at the same situation and all with the same general facilities would differ very greatly.

Mr. HINRICHs. They wouldn't have the same facilities, would they, Professor Fetter? This is a city which has developed slowly and has justified an expansion of plant. These are brickyards, if you like, outside of a growing city, some old, those that were first built, others new. The newest plant does not have the capacity to supply more than 15 or 20 percent of that market, for example. It would be in a position where under competitive conditions it would operate with relatively low costs and high profit for the time being.

Professor FETTER. You have raised the question there that is about as big as the whole thing that we have been discussing, the whole matter of costs.

Mr. HINRICHs. I know it.

Professor FETTER. I am a bit embarrassed in answering for the reason that I am a great heretic on the whole conception of business

costs. I think that this great difference of business costs that we talk about is simply an expression of a belated capitalization of certain facilities. If one plant is, as we say, making a much larger profit than the other plant, the one will probably have to recapitalize its facilities downward and the other one to do it upward, but the accountants are very tardy about that.

Differences of cost between establishments that are carrying on business side by side are, in my judgment, in most cases simply the expression of defective accountancy methods.

Mr. HINRICHS. I am willing to drop the question of cost for a moment and simply say that the profits of those firms would be very different indeed, some firms making a high profit, other firms actually incurring a cash loss in their operations, and still under competition conditions being justified in continuing their operations. That would be a fair statement of the profit set-up there; would it not?

Professor FETTER. Yes. The last statement, "being justified in continuing their operations," means that they would be justified in a somewhat longer view than the mere present moment, or the present year. They would be justified because they expect business to return perhaps.

Mr. HINRICHS. At all events, they minimize their current losses by operation—such things, for example, as taxes—in the expectation that sometime or other they are going to operate.

Now, let's suppose that we are producing 10,000,000 brick a year in this market, and that under those conditions these 7 plants have been operating. Now there comes a drastic curtailment of business activity. Let me make one further assumption, that is too extreme for the general rule but that can be illustrated. Let us assume that approximately 50 cents on that dollar price represents relatively fixed costs of efficient and profitable producers.

Under those conditions, if there is a severe business reaction and the volume of brick which can be sold at 50 cents is only 5,000,000 rather than 10,000,000 brick, you would expect the competitive price to be driven down in that market to something approximating that 50-cent figure, thus establishing a new margin of production. Some mills would have to close down. That would also be a fair statement of a competitive price in that condition, approximately; wouldn't it?

Professor FETTER. Yes; I think so. I would like to make perhaps a further explanation.

Mr. HINRICHS. I will be glad to stop if you care to do it now.

Professor FETTER. Go on now.

Mr. HINRICHS. Then that means that during this period of a reaction in the market, the losses, even of efficient plants, are going to be very large indeed until the market is restored so that it will take a larger volume of brick. That would also be true, would it not?

Professor FETTER. Yes.

Mr. HINRICHS. Many of those plants, if a period of depression would be long continued, would be bankrupt, presumably. Your less efficient plants there would certainly be bankrupt.

Professor FETTER. Perhaps I might make my explanation there. I think one of the most persistent confusions in this discussion of overhead costs is a confusion between contractual overhead costs and

merely estimated overhead costs. If the whole plant is fully paid for and out of debt there are no contractual overhead costs. But those two ideas are intermingled as if they were the same thing. Now, what makes the trouble at the period of the depression, the greater part of the trouble, what makes our whole economic system like a house of cards, is the immense volume of debt, contractual debt. The issue of corporation bonds is a sort of gambling speculation engaged in by the stockholders in periods of prosperity. They can borrow money for less than the rate of dividends that they expect, and consequently can largely increase their dividends in periods of prosperity, but the penalty they pay for it is that it is a contractual interest charge, and therefore when the profits of the business decrease, they face the sheriff and bankruptcy. But a company that is completely out of debt does not face the bankruptcy that you are picturing here. It faces loss of dividends but not bankruptcy.

Mr. HINRICHS. It faces also current losses of working capital if it is anticipating that at some time in the future business is going to revive. It always has the option of closing up and letting the sheriff and the county take the property; but so long as it expects ever to be able to come back into profitable business it is in a position where it stands to lose rather heavily out of working capital.

Professor FETTER. Yes; but I venture to say that if you will introduce this thought of contractual overhead costs into your thought, you will have a very small part of this problem left that you feel is so difficult there.

Mr. HINRICHS. We do have to start, though, with the assumption that if you are beginning to consider what can be done to make our economic system function more effectively you have got to start from the point where we are, recognizing the existence, among other things, of contractual debts; don't you?

Professor FETTER. Yes; but it is part of the problem of the future to see whether we haven't made a mistake in encouraging and permitting the immense volumes of debt. I see Commissioner Frank is nodding to that, and he represents a very widespread sentiment on that subject.

Acting Chairman KING. I might add right there some people encourage the increase of the debt of the Federal Government, and they want now, some of them, that we shall raise the debt limit to \$75,000,000,000, and there is a tremendous drive to raise it to at least \$50,000,000,000 or \$55,000,000,000. So the Government of the United States and its officials, big and little, seem to be encouraging this idea of governmental debt—spend more money, spend more money, instead of economizing. And, of course, that is an additional burden upon industry, upon those who are manufacturing, an additional debt upon the farmer, an additional debt upon the entire economy. We ought to practice a little economy in the Government, and perhaps that might influence a little more economy in private activities.

Professor FETTER. Senator, a few months ago at a little gathering in Washington we were discussing the way out—you know all Americans are interested in finding the way out—and several expressed the view that we should create easier credit facilities and that would start business. I kept silent until I was smoked out, they asked my

opinion, and I said, "We forget that credit is debt, and debt is damnation."

Mr. FRANK. Professor Fetter, may I interject there, to follow up your discussion? I take it that what you have just said indicates that you believe that financing should be done to a very largely increased extent by equity financing, so-called, rather than debt.

That is to say, persons investing in industry must recognize that the mere fact that they have a piece of paper with a lot of engraving on it, and complicated lawyer's language, giving them a so-called right to interest, doesn't necessarily mean they are going to get it if the industry can't earn the interest; and that the only difference in the last analysis between the bondholder or creditor and the stockholder is that while they are all co-adventurers, the bondholder has a prior claim against the income and the stockholder a junior claim; and that if we once recognized that fact and recognized also what might be called the "industrial hernias" that frequently occur when defaults in interest bring about bankruptcy—with benefit mostly to the lawyers, bankers, and accountants—we would see that we are doing ourselves an injury and impeding our industrial progress to a very large extent by this excessive interest in interest; and that therefore, when you spoke of the undesirability of too much credit you did not mean that there was anything undesirable about further investment in the form of stock. Perhaps you meant to imply that if governmental assistance is to be given to industry in a desirable way it might well take the form of supplying money on the equity end rather than through the increase of debt. Or would you go that far?

Professor FETTER. Yes; I think so. But I had in mind the whole policy toward business. The corporation set-up has become so complicated and this issuance of quite different varieties of securities complicates it still more. It introduces an element of gambling as between the different types of securities and evidences of ownership or equity, and as apropos to the matter of technological changes, where could you find a better illustration than the fact that certain railroads have bonds now outstanding to run for 200 years, issued when the railroad seemed to be the one great technological means of mass transportation, and we see now the difficulties.

It does involve a certain amount of unnecessary gambling as between the various stockholders. We are making the corporation device a sort of gambling equipment for a Monte Carlo.

Mr. HENDERSON. Mr. Chairman, could we ask Professor Fetter to develop that point, not as respects the gambling among different property interests, but what is its effect on price adjustment, given a situation that Dr. Hinrichs has described, a decline in volume of demand. Could you discuss the question of what are the possibilities of adjustment under, say, larger equity ownership rather than contractual debt relationship?

Professor FETTER. That, of course, is connected with this whole matter of the effect of large combinations upon recovery, the effect of monopoly upon recovery in a depression, and I think that is a doctrine on which there is almost complete, perhaps complete, agreement among economists, not only in America but in the leading countries of the world, that the slowness of adjustment downward of prices in

a period of depression, when once we are enlisted, throws an undue burden upon all the other classes of society and retards reemployment or reduces the amount of employment to a very undue degree.

(Representative Reece assumed the Chair.)

Prevention is far better than cure, and I trust that we will find a way to deal with depressions that will prevent their coming rather than simply letting the disease come and then treating it.

But, given the situation now that we do have these depressions, there is no question that the rigidity of prices does retard the rate of recovery.

MR. FRANK. And the fixed burden of interest charges may be one of the motives that prevents price declines—I think that is what Mr. Henderson meant.

Professor FETTER. A very important one, and the officials of a corporation very naturally deal with the matter of defaulting on their contractual interest as a far more crucial question at the moment than merely the failure to earn dividends upon their stock.

Acting Chairman REECE. I think Mr. Ballinger would like to ask someone a question.

MR. BALLINGER. I would like to ask Commissioner Frank a question. A little while ago I think Professor Fetter said he was very glad to find out you were not in favor of the N. R. A., and ever since I have been worried that you are really in favor of the N. R. A., so I want to ask you a few questions.

This morning you have been developing the thesis that there may be another way to control monopolies in the public interest. I suggested that probably when you got a monopoly the Government had to step in and regulate it by certain very definite standards of performance, and you suggested that this could be accomplished by cooperation between the monopoly on the one hand and the Government on the other.

I want to ask what is the difference between that kind of philosophy and the philosophy exemplified by the N. R. A.? There you had monopolies on the one hand and wholesale cooperation between the monopolies and the N. R. A., and a wholesale betrayal of the public interest.

MR. FRANK. I will have to answer by making several statements. In the first place, I do not like to have imputed to me the notion that I think that all the industries which should be dealt with in the manner that I have indicated are monopolies of a pure type. Professor Fetter, I was glad to find, agreed with me that we have all kinds of shadings between pure competition and pure monopoly. An industry may be one in which pure competition no longer prevails or can ever prevail, in which what Professor Chamberlin has called "monopolistic competition" ¹ prevails; and I hope before this committee closes its inquiry that there will be an opportunity—and I think Mr. Henderson is intending to see to it that there will—to go into what is meant by the words "monopolistic competition," for it will avoid the false antithesis implied in your question; that is an invariable antithesis between something that is pure competition and something that is pure monopoly.

As to whether what I am suggesting is N. R. A.—I thought I had indicated that one of the things I thought was wrong with

¹ The Theory of Monopolistic Competition, by Professor Edward Chamberlin.

N. R. A. was that attention was not always devoted, primarily, to the question of increasing production and procuring lower prices; and that in using, in some industries, the kind of "cooperative" device that I have vaguely suggested—and which I called "wiff-waff,"—it would never be forgotten that that would be the primary function of that device.

I might perhaps shorten what I have to say by asking leave to file part of a book I wrote recently which I have reason to believe my inquirer has read. So, for his purposes, I needn't answer the question, since he knows what the answer is. Perhaps I needn't bore the committee and try to get some free advertisement by merely reciting what I said there.

However, to state it simply—

Acting Chairman REECE (interposing). Better give us the name of the book.

Mr. FRANK. No; I am going to suppress that.¹

Professor FETTER. We are all trying to save America you know.

Mr. HENDERSON. And we all want to be first.

Senator KING. That is the book, may I say, which I read with great interest and there were a number of points which I agreed with my friend, particularly where he condemned professors—economists, rather. [Laughter.]

Mr. FRANK. I didn't mean to condemn professors.

Professor FETTER. I thought that was pretty good, too.

Mr. FRANK. I have no condemnation of professors or economists of the type who have the fine intellectual equipment and integrity of Professor Fetter. If we had more of them, I think we would have been in far better shape.

Senator KING. I made an error. I will strike out the word "professor"; I meant "economists."

Mr. FRANK. I think Professor Fetter still calls himself, unfortunately, an economist, but we should have a new terminology for the kind of man he is.

To get back to the question I was asked to consider, I think one of our problems results from this fact: that our industries in which integration has greatly advanced have not had to rub elbows enough with other industries in like condition. To illustrate my meaning, I think that what happened in N. R. A. days might have been far different if, instead of having separate, insulated code authorities, there had been some kind of interindustry council in which the automobile industry, for instance, would have appeared before the steel industry and representatives of the Government and said, "We want lower prices for steel."

In other words, a council, in which there would be intensive bargaining between the industries which have reached the integration stage. We need to have more hard bargaining between such industries. Perhaps such interindustry bargaining would produce the desirable consequences which competition is supposed to produce.

So I repeat what I said before, Mr. Ballinger, that I think there needs to be a differentiation between the objectives which ideal competition was supposed to attain and competition as a method of attaining those objectives. What we are primarily interested in is

¹ The title of Mr. Frank's book is "Save America First."

certain kinds of results. And if those results can be obtained in those industries where competition cannot now be restored—if there be any such, and I think there are; I mean, competition in the good old-fashioned sense—then it seems to me we need to canvas the question I have raised. We needn't throw the baby out with the bath water, saying that because there was a thing called N. R. A. which made some mistakes, everything that remotely resembles it is forever to be condemned, and that every effort on the part of Government and industry to get together for the solution of our industrial problems must either take the Pollyanna form of muttering polite words which mean nothing, or of precisely the kind of activities, methods, and aims that you associate with N. R. A.

So your question really is of the type, "Have you stopped beating your wife?" and I can't answer that kind of question.

Mr. HENDERSON. Mr. Chairman, being the only official connected directly with this committee who was also connected in an important position with N. R. A.,¹ I have been a bit disturbed at the complete wholesale condemnation of N. R. A. and with the connotation that went with Mr. Ballinger's statement that the public interest was totally ignored.

Mr. FRANK. I haven't joined in that criticism, Mr. Henderson, of that blanket character.

Mr. HENDERSON. I think that if that kind of blanket condemnation of all the effort of earnest-minded people at N. R. A. continues in this committee, I shall ask the committee for an opportunity to discuss the constructive efforts that were made by people at N. R. A. in order to put before this committee the lessons that way to be learned from the N. R. A. experience.

I think my own record of opposition to price-fixing and monopolistic restraints as they occurred in codes is fairly clear from the record at N. R. A., but I certainly cannot stand idly by and see every effort that was made there in an emergency period, in a period of great threat to recovery in this nation, condemned as being totally against the public interest.

Mr. FRANK. May I subscribe to what Mr. Henderson said and indicate that by my comments I did not mean to join in such blanket condemnation. I think this committee could do no more useful thing than to have canvassed what N. R. A. did—so as to learn by its mistakes, for humanity has often learned by mistakes—and to take over, perhaps as part of any suggested remedies we may propose, the virtues of N. R. A. and seek to apply the very constructive devices that persons like Mr. Henderson were able to introduce into the workings of N. R. A.

Senator KING. Mr. Chairman, as far as I am concerned, the N. R. A. episode is ended. Efforts were made, violent efforts, to continue the N. R. A. I was very much opposed to it. The efforts to secure a continuation, a modification of it, failed, and it is "out of the window," to use the expression so commonly used.

I don't feel it is the duty of this committee to hold a post mortem as to the virtues or vices, the goodness or the badness of the N. R. A. It may be that there are some lessons to be deduced from that organi-

¹ For positions held by Mr. Henderson at the National Industrial Recovery Administration (N. R. A.), see Hearings, Part I, pp. 157-158.

zation, from its activities. There was some good in it, and I believe a great deal of bad.

I do pay tribute, however, to the ability, the patriotism, and the fine work which was performed by Leon Henderson. I think whatever virtues it possessed were largely the result of his fine statesmanship.

Let's pass on.

Mr. BALINGER. Mr. Chairman, I should like to say also that perhaps I owe Mr. Henderson an apology, but I was coming around to it if I had gotten in at the end of Mr. Frank's statement, where I would have exonerated myself.

Mr. Frank said the trouble with N. R. A. was there was not enough attention given to the problems affecting the public interest. I know there was considerable attention given, and Mr. Leon Henderson gave considerable attention to that himself. There was a small, earnest group in N. R. A. that were very generally socially minded. I think in the end they were pretty overwhelmed themselves. I may be wrong; that is my general impression as a newspaper correspondent. They put up a tremendous battle on the inside, but they got licked.

Acting Chairman REECE. Are there any other questions?

Mr. HINRICHS. Professor Fetter, I should like to come back again to this situation of competition, if I may, for a few minutes, because it seems to me that one of the things which this committee is going to have to study is just exactly how much competition our body politic can stand. In that competitive market shown in chart A,¹ in a period of business depression, it was possible to foresee a set of circumstances in which each of those producers might be engaged in losing heavily on current operations and in which a very substantial number of those producers might be bankrupted.

Let me change the design of that chart just a little bit to extend the radius within which those plants are located. They may then be located in labor markets which are not absolutely identical or uniform in character. A brick plant might very well be located 50 or 75 miles out into the countryside, delivering by river, let us say, and be in a very different kind of labor market than the other plants delivering to the same consuming market.

If a plant in that position finds itself faced with very large losses during a period of depression, one of the things which is going to happen under conditions of severe competition is a serious effort to depress wage rates, beginning at those points which are most susceptible to wage decreases. That would be correct, would it not, as a matter of the reactions of competitive businessmen?

Professor FETTER. Naturally, that would be the effort; yes.

Mr. HINRICHS. That effort might very well be successful in an unorganized labor market, where the opportunities for alternative employment were seriously limited; is that correct?

Professor FETTER. Yes; but the effort to maintain a fixed money wage at a time when cost of living is rapidly falling, as it does through the lowering of food prices and other things, means essentially a raising of real wages, and it would seem that a minimum reduction of money wages that would give as high a real wage in

¹ "Exhibit No. 351," appendix, p. 2186.

terms of the cost of living would be only a fair adjustment. So much effort is being made to retain a rigid wage rate in terms of hours and days, which is a part of this problem of rigidity in periods of depressions.

Mr. HINRICHS. The point that I am interested in developing, Professor Fetter, does not involve the assumption that there is no necessity at any time of making adjustments in wage rates, but it does involve the process that we have just discussed. A freely competitive market in a period of depression does involve the possibility, does it not, of a continuous tearing down of the wage structure in this market, and in that very destruction may still further limit the possibilities of sale in that market of other commodities?

If you hesitate, let me put the thing in a form that would be somewhat more general, that I think you might be able to accept without committing yourself quite so broadly. There is such a thing as a vicious spiral in a period of depression where the very acts of readjustment lower the level at which equilibrium will be reached. That ultimate level may be very low, indeed, lower than would have been the necessary level if you had merely to take into account the lack of balance that you had on hand in the original instance and did not create new strains on the way down. You would recognize that as a very powerful force, wouldn't you?

Professor FETTER. Yes, Mr. Hinrichs; but I needn't say to you as a man of economic training that there are two problems here that need to be kept quite separate in our thought. We don't clarify, we simply confuse if we mix the problem of the relative prices in different markets at a moment of time, or in a brief period of time, with the other very great problem of industrial depressions or the business cycle. We start to discuss this question of geographical differences of prices, the relationships of prices to each other, which is not essentially a depression problem at all, and then we shift over to the problem of depression and discuss the adjustments of prices as between different industries that must occur and do occur at that time as if that were the question with which we started, and it isn't. It is an entirely different problem.

Mr. HINRICHS. It does come into this problem, though, at precisely this point. Let's assume now that this competitive market that you have labeled "B" is no longer a competitive market, but that agreements have been reached among those seven manufacturers, under the pressure of extreme competition to maintain a price higher than a competitive price.

That will not be a monopoly price of a single producer; it is a compromise, a cooperative monopoly price, in which weak business units, economically weak units, will have been preserved over fairly long periods of time. Such a cooperative monopoly means that bankruptcies that should have been occurring from year to year, or let's not say the bankruptcies, but the scrapping of equipment and its replacement that should have been going on from year to year, has not been taking place as rapidly as it would under competition conditions. Therefore, in such a protected market a much larger area of weakness, economic weakness, will have developed than you would have expected to find had that market remained continuously competitive. That would be a fair statement, would it not?

Professor FETTER. I think you have said something there of importance, indeed.

Mr. HINRICHs. If I can just ask my next question that does then bring the depression phenomena into the picture.

Professor FETTER. You mean it brings the monopoly and conspiracy question into the depression picture.

Mr. HINRICHs. Yes, and it means that once that situation has been established over very broad areas, you may have to recognize the situation from which you start and proceed to work yourself back to a competitive price with more gradualness than might otherwise be the case. You have large potential accumulated losses there which may very well be more than either the economic or political system can assimilate.

Professor FETTER. I think you have touched there on a very important point, that if you have an artificial situation going on in periods of so-called prosperity, you have created an unsound situation; you have held the umbrella over weak units of the industry, and the result is that when the depression comes you have a very much less stable situation, a very much more unsound foundation for business, and therefore the collapse may be greater.

Mr. HINRICHs. We are concerned, I assume, with what is going to happen to the operations of this country in the years that are immediately ahead. You, in your book in 1915 gave a very able, very brief, exposition of the fact that you start from a given set of prices; you don't have the pricing mechanism going into operation *de novo*, but you start from where you are in order to get to something new.

Is it conceivable then that we may have reached a situation in some places where we are no longer free to take away the umbrella if we don't bring out at least a raincoat to hold until the storm has stopped?

Professor FETTER. Fortunately, the responsibilities of the economists have their limits, and the problem you put is the problem of statesmanship. What you are going to do about a situation that is here; how are you going to get out of this impasse where you find yourself?

Mr. HINRICHs. Would it be your opinion as a very careful observer of the economic system that it would be wise to provide for various contingencies, or do you think that the economic system is strong enough to stand a complete attempt at a restoration of fully competitive conditions?

Professor FETTER. Of course, all of your later questions have been directed to this question of our present situation, and the present prolonged depression, and the problem is very much the same as that of the reform of an opium fiend, or an alcoholic. You can do it in one of 2 ways; you can either cut it off absolutely and make him sober up or you can taper off with broken doses. I think both methods have been followed and have their advocates.

Mr. HINRICHs. That presupposes then, in your judgment, if I put that together with your earlier answers to Commissioner Frank, that your prejudice is all in favor of the establishment of as broad a base of competitive operations as is possible, and that you therefore develop various devices that further the competitive operation but

that you may need to visualize the establishment of intermediate devices that lie somewhere between the measures pushing toward complete competition and complete forms of public regulation, more or less as simultaneous methods of approach rather than as strictly alternative methods.

Professor FETTER. Yes; but if you are willing, I would change the word prejudice to social philosophy. My social philosophy would lead me to that view.

Mr. FRANK. The other man's social philosophy, if you don't like it, is always called prejudice.

Professor FETTER. Yes; his prejudice, but, further, I would caution against your use of the term "complete competition" because in the interchange of views between Commissioner Frank and myself I think it was agreed that an ideal perfection, 100 percent, was a thing of the closest philosophy and not of actual experience.

Mr. HINRICHS. That opens up another line of questions which I would rather not take the time of the committee with, except to make this one comment. It seems to me that precisely because there is an absence of the conditions of perfect competition, precisely because perfect competition is inapplicable to an operating situation, we are forced to think in terms of degree. There is a certain point at which theoretically noncompetitive pricing is still regarded as acceptable within the limits of what we think about as competition, but the moment you admit a series of limitations that do attach, you begin to deal with qualitative things: What is acceptable and where is the unacceptable?

You can't move toward the system of completely free competition that serves as the economist's tool of analysis for purposes of clarifying his thinking.

Professor FETTER. Our choice of behavior in the real world in everything has to be a matter of degree. The problem of choice lies on the margin of indifference.

Mr. FRANK. Professor Fetter, may I ask two more questions?

You will recall this language, I am sure. "People of the same trade seldom meet together even for merriment and diversion but the conversation ends in a conspiracy against the public or in some contrivance to raise prices. It is impossible to prevent such meetings by any law which could either be executed or would be consistent with liberty and justice." You will recall, of course, that those words were uttered about the year 1776 by Adam Smith.

Professor FETTER. I have seen that. You quoted them and I quoted them the other day before the committee.

Mr. FRANK. I was not present, I am sorry. We know of the Gary dinners. We also know that Watkins pointed out after the Northern Securities decision in 1904, "The available evidence indicates that the combination movement may simply have been driven underground, manifesting itself in an increasing resort to sub rosa agreements in the looser forms of confederation."

You said yesterday, in response to a question, that the elimination of the basing point would not get rid of all monopoly, and at another point you said that monopolistic devices were multifarious. Human ingenuity is sufficient so that no doubt those monopolistic

devices that we now know would be followed by others not yet thought of, if we were to eliminate all those we know about.

The reason I make that statement is this: Reference was made, in the memo¹ introduced yesterday, to the method of "policing," as distinguished from "regulation." I took that to mean that enforced competition by governmental policing could bring us the desideratum of the writer of the memo, namely, the desirable state of fair, free competition.

Don't you think that the divers methods that could be contrived for bringing about a restriction in competition in many industries would make the job of policing far more difficult than what I have called "ugwug"—that is, some new kind of "cooperative" governmental "regulation"—and that also, from the point of view of the businessman, if he had to choose between, on the one hand, the kind of policing that such enforced competition would entail—the kind of constant surveillance of his every act—and, on the other hand, the kind of governmental dealing with his business activities that the other form of approach would entail, the businessman in those industries which today have some marked element of integration would much prefer the latter to the former.

Professor FETTER. I have agreed with you in so many ways that I am sorry to disagree so completely with this view. I doubt the propriety of the contrast between regulation and policing.

Mr. FRANK. I didn't make the contrast.

Professor FETTER. You used the term as if policing were in conflict with regulation.

Mr. FRANK. I took the term "policing" (as describing enforced competition), from the pamphlet that was introduced yesterday.

Mr. DAVIS. Mr. Chairman, I think it proper to say that the term there was used in the sense of regulation; that is, the appropriate governmental authority that had jurisdiction over the laws designed to prevent monopolistic practices should observe the situation and investigate in the case of complaint or information, as they do now, with the view of enforcing the laws in existence or which might be enacted to prevent the monopolistic practices, and it was not contemplated at all, Commissioner Frank, that it meant any internal policing of their management except insofar as the practices might relate to a violation of the law.

Mr. FRANK. I am sorry. I didn't intend to indicate anything otherwise, and if I did I am sorry. I was taking from yesterday's memo² the antithesis between that type of "regulation" which would "enforce competition," so to speak, and the type of "regulation" (if you want to use that terminology) which would be invoked in the instances where you had monopoly which you were going to recognize. My own feeling was this, to break it down into two parts: First, that the kind of regulation called "policing" would involve a far more difficult task, since it would be spread over the large number of units in an industry, particularly as the enforced competition would create more units presumably. Second, if one were to consult the businessmen involved and ask them which type of governmental activity they

¹ "Exhibit No. 358," appendix, p. 2192.

² Ibid.

would prefer, my guess is they would prefer the latter rather than the former.

Mr. DAVIS. But from the standpoint of this committee that is to report and make recommendations to Congress, do you not think that the proper viewpoint is not merely to do things that will appeal most strongly to members of industry themselves but to undertake to do the things that are in the general public interest?

Mr. FRANK. Oh, I agree entirely. The only reason I raised the question is that the memo, I thought, was somewhat colored by indicating that the business world would react—maybe I read the memo incorrectly—more violently to the one type of governmental activity (which, for lack of a better word, we will say is “regulation of monopoly”) than to “enforced competition.” If that business reaction is an important element in the discussion of the matter, I wanted to indicate that, perhaps, if one were to consult the desires of the businessmen and their reactions, the color ought to be the other way. As you said yesterday, Professor Fetter, in large parts of our business world today men have grown up who are so accustomed to a restriction of competition that it would involve a violent wrench in their habits to try to stop their relatively non-competitive methods of doing business. You indicated that they had grown up in a generation which was unaccustomed to the old type of competition.

Professor FETTER. In certain industries.

Mr. FRANK. In certain industries. And I am suggesting that, in those industries, enforced competition would mean something almost, equivalent to a revolution in habits; it would mean those businessmen virtually being reeducated, you intimated, if we were to employ the method of enforced competition.

I repeat that if one is to give emphasis to the reactions of the businessmen then the businessmen whom you described yesterday would find it far less agreeable to have “enforced competition” through so-called “policing” than to the other kind of governmental activity—if there has to be one or the other.

Acting Chairman REECE. I think Mr. Henderson would like to ask a question.

Mr. HENDERSON. I would like, Dr. Fetter, in that connection to point it up a little bit more. It is certainly true, isn't it, that where there are a large number of sellers in American industries and where there has been adequate policing of the rules of conduct of fair competition, monopolistic devices have not been able to be erected; monopolistic practices have been at a minimum. That was our experience certainly at N. R. A. Does it not follow then, that given a set of principles which would outlaw kinds of devices and mechanics by which monopoly is attained and maintained, and given also a set of principles which would obstruct and in some cases destroy the intensive concentration, it would be possible with a minimum of Government umpiring and refereeing to keep a healthy amount of competition in many industries which are almost accepted as being inevitably monopolistic at the present time?

To restate, if this Government had been alert and aggressive each time it had encountered, in the Federal Trade Commission and the antitrust bureau, a device which ran contrary to the law and contrary

to the genius of the people, and had it had the facilities to keep after that practice and prevent it from being continued sub rosa by industries, a large number of these industries that are now accustomed to the restrictive practice would now be competitive in a fairly healthy sense. If we could look forward to a condition under which there would be no toleration of the restrictive devices and mechanics of monopoly, and also an aggressive refereeing by the Government, many, many of these ideas of restoration or of adoption of some other new alternative monopolistic device would not be possible.

PROFESSOR FETTER. I think that is an excellent statement, with which I fully agree. There is one point right in that connection that might be worth referring to—the very common assumption on the part of economists and of the public, too, that big business or giant corporations or any of those phrases refer to a single plant, and there is a false identifying of the economies of large production with the great financial aggregation of plants that are geographically distributed.

The freight factor is an exceedingly important factor in all of these large, heavyweight industries, coming back to steel there. Therefore, even though the largest industrial corporation in the world owns 10 or 20 or 30 identical plants, it finds it economic to operate them in different parts of the country and very nearly all, if not all, of the economies and efficiencies of large production that are discussed relate to the individual plant in the case of production, probably less so in the case of merchandising and distribution, such as chain stores. Yet there is a very strong assumption—and I am not sure how far Commissioner Frank shares that—that the only possible way that we can maintain our present standard of living by abundant production is in permitting these horizontal combinations of 10 or 20 or 30 or 40 big business plants under one ownership. The larger part of the result, the larger part of the motive, for the formation of those great financial corporations, I believe most people agree, was the control of selling methods and not the technical efficiency; it was the control they gave them over prices, and I think we would sacrifice little, if any, of the technical efficiency of industry, of our present methods of production, by breaking up a great many of these great aggregations, these giant corporations.

In other words, smaller corporations, in view of our present holding company laws, do not necessarily mean smaller and less efficient mills.

MR. FRANK. Professor Fetter, not that my views are important, but just to get them on the record since you raise the question: My own attitude—and I think it ought to be the attitude of all of us—would involve an approach to each of those industries with an open mind and without any a priori judgments on the subject; except only that I will agree with you that the presumption should be in favor of competition. But, granting that presumption, it seems to me that each differing area of industry presents a separate question of fact; that criteria of social desirability should be applied separately to each one of them and that no blanket formula should be applied to all.

To illustrate the effects of competition in an industry where integration has already gone far, let me recall to you what happened

to the railroads. As I recall it, prior to 1912, certain great railroad systems were expanding. The Pennsylvania, for instance, had control of the B. & O., and the New York Central of the Nickel Plate.

Substantial reduction of competition had taken place or was threatened. Those who favored competition used governmental persuasion or threatened coercion, in effect, and forced the Pennsylvania to give up the B. & O. and the New York Central to give up the Nickel Plate. The result undoubtedly was increased competition. Competing main lines were improved with great expenditure of investors' money. But many people believe today that we have far too many competing main lines.

Millions of dollars have been wasted, they say, in the improvement of those competing lines. There isn't enough business to go around; they assert; the earnings of the several competitors have fallen off; the securities they have issued have shrunk in value and some have become worthless; reduced earnings have led to skimping of maintenance that is bad for our economy, bad for investors, labor, shippers, and consumers; needed improvement of the main rights-of-way cannot today be financed. If that diagnosis is correct, increased competition thus brought about was not a blessing.

So I come back to my main point. Must we not be careful to avoid the overgeneralization that to enforce competition is always socially desirable?

Professor FETTER. I think that general proposition is sound, but you chose as your illustration a pre-eminent public utility.

Mr. FRANK. Exactly; and that is why I said I was taking an extreme instance. One could shade down from that to other less integrated industries. Let me take as an illustration the automobile industry, where we have a few large business enterprises. I don't know, I have no pre-judgment, but I think the question that one might well ask is this: Would the country be better off if we had 500 automobile companies competing?

It seems to me that there is an industry where one ought not to answer that question glibly and that one ought to ask, only after a careful survey, whether today there is not enough competition. It happens to be an industry, I think, where the term "monopolistic competition" is applicable because you do not have the kind of competition, obviously, that you do between farmers: you do have what has been called administered prices; there is neither pure competition nor pure monopoly. Is that condition desirable? I don't think we ought to try to formulate the answer without a great deal of study.

Acting Chairman REECE. It is now 12 o'clock and I am wondering whether we are about through with the questions or shall we ask Professor Fetter to come back this afternoon or continue our period this morning?

Mr. FRANK. I have one more that will take me about 3 minutes.

Acting Chairman REECE. I think we might finish that.

Mr. DAVIS. Mr. Chairman, I just wish to ask one question right along the line of what Commissioner Frank was asking. Professor Fetter, Commissioner Frank has repeatedly said that before we undertake to pass upon a given industry we should study it and know what we are talking about and should not render a decision glibly. I am entirely in accord with that idea and I am sure you are, but in that

connection and in view of the fact that you have been talking on a certain subject, and that is the basing-point system, and with particular reference to the steel industry, I want to ask you to repeat how long and how intensively have you been studying that particular problem.

Professor FETTER. My interest in this had begun before the *Pittsburg plus case*, and it was because I had already worked out further than others the problem of geographical relationships of markets that Professor Commons urged me to come into the case with him for the associated States opposing Pittsburgh plus in 1923. Then is when I took it up intensively and I have pursued it more or less as my avocation and my civic duty ever since, about 16 years.

Mr. FRANK. I wanted to read a passage from one of Professor Slichter's books to see whether you agree with what he said. He says competition does not concentrate production in the plants of the most economical size for the existing volume of production in all cases.

One of the principal reasons he assigns—I am beginning to quote now—

is that modern industrial costs often make it unprofitable for an enterprise to attempt to gain business from competitors by the method of price cutting. Suppose that a firm by increasing its capacity from 50,000 to 60,000 units a year could reduce its unit cost from \$1 to 95 cents; it might at first appear to be a simple matter to enlarge the plant and to gain the additional business by cutting prices. Rival concerns with smaller plants and higher costs would have difficulty, it would seem, in competing at the lower prices, but would this be the result?

Modern industrial costs make it more advantageous to run an enterprise at a substantial loss rather than to shut it down. More than this, they make it possible to run at a loss because the payment of some costs can be long postponed. This means that any concern which seeks to take business away from its competitors must probably cut prices far below its own costs before it reaches a price which its rivals are unable or unwilling to meet. Often the possible gain does not appear to be worth the risk and cost of a long price war.

Then he goes on with a passage which I will paraphrase, to the effect that when there is considerable unused capacity, heavy fixed costs may cause cutthroat competition; on the other hand, when there is not much unused capacity, fixed costs may lessen competition. Fixed costs makes more difficult and discourages the attempt to drive out competitors.

From this it follows—

says Slichter—

that heavy fixed costs may impair the efficiency of competition both as a device for keeping down prices to the consumer and as an agency for eliminating inefficient managers and enterprises. High-cost enterprises may have a better chance of surviving when fixed costs are proportionately large because it does not pay to drive them out of business, but by surviving they limit the ability of other firms to achieve the saving of quantity production.

Would you agree with that?

Professor FETTER. That is a very long statement with which either to agree or disagree.

Mr. FRANK. Perhaps it is an unfair question.

Professor FETTER. It seems to me that throughout that, Professor Slichter is assuming a discriminatory type of competition—it is a

matter we discussed somewhat yesterday. He is assuming that this competition which is taking place, cutthroat, killing off, and so forth, is a discriminatory type of competition, in other words a type of competition which essentially can be carried on only by a monopoly. Now I question very much the advisability in our discussions of calling a thing competition which could be carried on only by a monopoly.

Mr. FRANK. I didn't assume that that was what he meant. I thought he meant something like this, to put it in homely terminology: If there is a large amount of unused capacity and there are several competitors in the industry, any one concern knows that if it cuts its prices—not in an unfair way but in accordance with what, according to classical economics, it ought to do—its competitors may do the same, and that as a consequence—this may not be precisely what Slichter was talking about but at any rate it is germane—there is an inhibition on competition in prices and on the search for customers, resulting not from any secret agreements but from a feeling which may be expressed thus: If I cut prices, Jones and Smith and Robinson, my competitors, also will cut; and the result will be that I will be no better off than if I were to go along on the basis of present prices.

So that one may have something in an industry which appears to be competitive that approximates what would result from an agreement among the parties to maintain their prices.

Professor FETTER. That is a very large question to raise at this hour of the day. It is really the theory of monopolistic competition, with some of which I have much sympathy but about portions of which both you and I have very serious doubts.

Mr. HENDERSON. May I point it up, Dr. Fetter?

Professor FETTER. Just let me finish this one point. This theory of monopolistic competition is a very subtle and refined theory which really emanated from the philosopher's closet and not from practical experience. It is in a sense a revival of the concept of the economic man who knows everything, who foresees everything, who counts upon all of his competitors acting rationally, and after stating the theory in one of your chapters you then give about as effective a criticism without seeming to disagree with it that I know of—I think you do disagree with it—namely, this: That after all men are human and they don't just figure out what the other man is going to do, they can't just be sure that he will do it; moreover, the impulse is very great. Give me three or four or five active competitors and I will pretty nearly assure you competition. This duopoly and oligopoly is conceivably true, but it is true rather with a recrudescence of the economic man.

Mr. FRANK. But this does happen—perhaps we ought not to pursue the discussion because I think Mr. Henderson is about to say that he is going to devote a session in the future to an exposition of monopolistic competition. Perhaps we should engage in that discussion at that time and not now.

Mr. HENDERSON. We hope, of course, as we go on to introduce a discussion of the theories of imperfect competition, but one question I wanted to ask you was that, given a situation, even a closet situation, which has become an actuality in an industry, where no price

reductions take place because of the feeling on the part of one of the oligopoly that any price reduction would be instantly met by others who are apprized also of the market, is it not your opinion that that kind of a condition results from competition; that is, that competition results eventually in a fewness of sellers, or that it is not possible to maintain any full working of imperfect competition without the aid of instrumentalities and devices and understandings and agreements which run contrary to law and to the concepts of free competition.

Professor FETTER. Yes; I think I agree to that; and it seems to me that while the whole concept of competitive monopoly or monopolistic competition is conceivable, I believe it is the experience of men who have long been in touch with these affairs that that is not the way the thing happens. It is more nearly Adam Smith's explanation, that they have come together and their conversation has ended in a conspiracy.

Mr. FRANK. Professor Fetter, that happens to be my own guess, except I would add this to it: That the condition of affairs described as monopolistic competition creates a tremendous appetite on the part of the men in that industry for getting together, and that that drive in that direction is so insistent that it is pretty hard to stop them from meeting at a lunch table or at a golf club.

Professor FETTER. And as it is so impossible to discover that, the way out is to observe their behavior. That is what we have not done. We have tried too far to hunt for their hidden motives and their intent and for some written testimony. If what they are doing is what they would do if they got together and made a formal agreement, then we should treat that as a formal agreement.

Mr. HINRICHS. Your primary test, Professor, of behavior would be what? Would it be the establishment of a break-even point for an industry when it is operating at an extremely low percentage of capacity? Would that be the primary test of whether the price were a competitive or a noncompetitive price?

Professor FETTER. No; let's stay nearer at home; it would be quoting identical delivered prices.

Mr. BALLINGER. One way to deal with these actual instincts would be to put some penalties in the antitrust law. You can't expect a man to refuse to get together and attempt to take \$10,000,000 when the result would be a \$200 fine on a corporation with \$1,000,000,000. I think those instincts are going to run wild until you find some way to deter them.

Mr. BERGE. I agree with a great deal of what Commissioner Frank has said with reference to the probability in particular industries that we will have to adopt new techniques of control because for special reasons competition is no longer an adequate self-regulator. However, I wondered whether you would say that we could properly make comparisons as to the efficacy of the antitrust method of enforcement and that of regulation by a commission on the basis of any experience that is now available. When we consider that there has never been any real effort at antitrust enforcement made until comparatively recently, when we consider that the antitrust division has usually had only 15 to 18 lawyers until very recently, a number that one defendant will have in a single lawsuit on his side, or per-

haps many more—50 lawyers appeared at one recent antitrust suit—on the basis of that experience how can we say that real enforcement might not in many of these industries prove to be an adequate solvent? I say that making due reservation for the special situation of many industries. Would you say, Professor Fetter, that the antitrust method, if really vigorously applied, would be inadequate to meet the sort of situation you have described in your testimony on the basing-point system without further legislation? I am not asking you to propose a specific legislative solvent, but rather to indicate generally whether you think our present technique has been adequately tried as applied to the steel industry.

Professor FETTER. I am very happy to have this suggestion, and I treat it as a support of the position that I have taken in the matter, as it comes from a representative of the Department of Justice. I am far from believing that the antitrust laws, especially the Sherman Act, as executed by the Department of Justice, has been utterly without effect; I think it has had a very considerable effect, but I quite agree with the suggestion and implication that it has been very inadequately enforced without earnest purpose and without adequate means, and I think there is far more to be accomplished in that direction than there has been. That would apply very largely not so much to the practice of the basing point as to this matter of mergers and combinations. It seems to me clear that in the first place the advantages of large financial aggregations are very greatly exaggerated, but that the public disadvantages may outweigh certain technical advantages of large combinations, that that as a matter of public policy the burden of proof should be upon any combination, a very strong burden of proof, not only to show that it be not monopolistic, but that it will not be against the public interest in other ways. Other things equal, decentralization of industry, it seems to me, is clearly in the public interest.

Mr. O'CONNELL. Dr. Fetter, if I understand you correctly, you think there are two things that are needed in connection with this problem. One would be a more adequate enforcement of the laws, and the other facet would be additional legislation based upon the experience that we have had under the existing laws. In other words, I have been under the impression from your discussion that the existing legislation in the field was inadequate and that it could be implemented by laws based upon the experience that we have had with the Sherman Act, the Clayton Act, the Federal Trade Commission Act. Is that correct?

Professor FETTER. Yes, it is; I thoroughly believe that.

Mr. BERGE. May I ask just one other thing? I think we are all agreed that we shouldn't indulge in generalizations and it is very hard to speak without doing so, but when the question is put as to whether a business community is more friendly to the one type of regulation than the other, doesn't it depend upon which group of the business community we are consulting? I can readily see, I think I am inclined to sympathize with the position that a producer of oil might take in regard to that question. There may be—I am not saying there is because I don't know enough about it—a situation there where competition is inadequate to keep the proper balance in the industry and where some special type of regulation, perhaps produc-

tion control or something akin to it, is required, so that type of businessman would probably prefer a commission type of regulation in competition, and I can conceive of many industries where probably the drift is that way and inevitably will have to be. So for that reason I can agree with a great deal of what Commissioner Frank has said.

But on the other hand, isn't it true—now I am indulging in generalization—that the rank and file businessmen, don't you think, would probably feel that in the widest area of business they would rather have relative freedom in a large domain with certain practices chopped off by the law as being illegal and have to conform themselves to those limitations rather than to have every detail of their business regulated, and they often think of it as regimented, by a commission? I don't think we can have all of one or all of the other. I don't think that the three of us probably are very far apart, but I do think that we can't let go unchallenged the statement that the community as a whole would favor the regulatory type, because it seems to me in talking with many businessmen that the statement is made that we ought to enforce the antitrust laws and thereby keep a large area of business free from detailed regulation rather than to have commission regulation, and I think it comes back to an industry by industry approach. In some industries some situations that are traditional technique if vigorously applied and fairly applied are adequate and should be preserved and improved; in other industries we will have to frankly recognize that some new technique of control, probably along the general line indicated by Commissioner Frank, should be adopted.

I wonder if as a poor attempt at summary you wouldn't agree with that statement of it that I have made.

Professor FETTER. I do agree with it, with this caution: that we could easily go much too far in assuming that the problem before us differs so greatly from industrial ethics. If we go far with that thought it means that we are going to have a bureaucratic examination and regulation of each separate industry, whereas I think the N. R. A. is an example of the fact that if there were any regulations of ethical practice that were valid for one large industry they were probably valid for all. The notion that you would have a separate ethical code for each one of five or six hundred industries is an absurdity. The ethical code is a code of common, decent practice, fair practice, and I think if that were laid down in simple terms, then the problem of administration under a body like the Federal Trade Commission would be fairly simple.

Mr. BERGE. I wasn't thinking so much of that as the fact that I suppose we have to recognize that there is an ever-widening group of industries affected by public interest that do get, under modern conditions, separate legislative treatment. That used to be restricted to the traditional type of public utility that has the right of eminent domain; and other strictly legal tests were applied, and through the years we have broadened it to include such things as elevators, grain markets, stock exchanges, packers, stockyards, the milk industry in New York State where regulation was upheld by the supreme court, and I suppose we shall have to recognize there will probably be unique situations in particular industries from time to time which will re-

quire separate treatment. I wasn't thinking about a bureaucratic decision of that question, I was rather thinking of a legislative decision where Congress or a State legislature from time to time would have to, under the compulsion of necessity, extract certain industries from the antitrust technique and apply different techniques to it, and although fundamentally I agree with your underlying point of view, yet I think we have to recognize the exceptions that will from time to time have to be carved out.

Professor FETTER. I think we all feel that to as great an extent as possible the legislatures should assume the responsibility. Too often they have passed the buck, so to speak, to the administrative body. They have left too large a part of the problem vague, with such phrases as simply hide the confusion in the mind of Congress itself.

Acting Chairman REECE. If there is nothing further, the committee is deeply appreciative of your appearing, Professor Fetter, and the very able contribution which you have made to this study.

Mr. Ballinger, will the Federal Trade Commission be ready to proceed with another study in the morning?

Mr. BALLINGER. Yes; we have another industry ready for presentation tomorrow morning.

Acting Chairman REECE. The committee then will stand adjourned until tomorrow morning at 10 o'clock.

(Whereupon, at 12:35 p. m., a recess was taken until Thursday, March 9, 1939, at 10 a. m.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

TUESDAY, MARCH 14, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE
Washington, D. C.

The committee met at 10:25 a. m., pursuant to adjournment on Saturday, March 11, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senators O'Mahoney (chairman) and King; Representatives Reece and Williams; Messrs. Ferguson; Davis; O'Connell; Lubin; Henderson; Berge; Thomas C. Blaisdell, Jr., representing Securities and Exchange Commission; Ernest Tupper, representing Department of Commerce; Milton Katz, representing Department of Justice.

Present also: Federal Trade Commissioners William A. Ayres and Charles H. March; Willis J. Ballinger, director of studies and economic adviser to the Federal Trade Commission; and Col. William T. Chantland, attorney, Federal Trade Commission.

The CHAIRMAN. The committee will please come to order.

I have delayed opening the meeting this morning in the hope that some more of the congressional Members might be able to appear, but the standing committees in both Houses are now holding daily sessions, morning and afternoon, and it is very difficult to cover all the assignments that one has. As a matter of fact, this morning the Special Committee on Reorganization, of which I am a member, and the Appropriations Committee on the War Department, are both meeting at 10 o'clock. Senator King has the Finance Committee and the District Committee and the Committee on Insular Affairs, and so it goes.

Mr. Ballinger, are you ready to proceed?

Mr. BALLINGER. This morning, Senator, we are going to present hearings on the sulfur industry. The witness for the Commission is Dr. Robert Montgomery, of the University of Texas. We request that the witness be sworn and then that Mr. Chantland, of the trial staff of the Federal Trade Commission, properly qualify Dr. Montgomery as an expert on sulfur, and interrogate him generally.

**STATEMENT BY COL. WILLIAM T. CHANTLAND, ATTORNEY,
FEDERAL TRADE COMMISSION, WASHINGTON, D. C.**

Colonel CHANTLAND. Mr. Chairman and gentlemen of the committee, when this study was undertaken and the topic among others allocated to the Federal Trade Commission of concentration of natural

resources, certain ones of those were assigned to me to procure studies to be made and to present them to this committee. Among those topics was sulfur.

In point of quantity, sulfur is not a major natural resource, but it has an essentiality in certain of the large basic industries that make its presentation of clear pertinency to the work of this committee. Among those basic industries are fertilizer, paper and pulp, steel, gasoline extraction, explosives, and rubber. Other facts strengthen the pertinency of the presentation of the sulfur situation. The United States produces over half the sulfur of the world.

Let me also state that in addition to being essential in the industries, it is vital in the national defense at present. There is no substitute for it in certain uses.

Besides the fact that the United States produces over half the sulfur, the situation in the United States, without trespassing too much on the territory of the witness, is this: The workable deposits are limited and are in two States only, Texas and Louisiana; and except for a few years and until very recently, the supply has been furnished by two companies from generally not over half a dozen mines.

The CHAIRMAN. How many mines are there?

Colonel CHANTLAND. Not over a half dozen that are worked. The doctor will explain why those limitations occur. I don't want to encroach on him on this.

When the topic was assigned to the Commission we learned that Dr. R. H. Montgomery, professor of economics of the University of Texas, had studied sulfur for a number of years, and in 1937 had prepared a study for the National Resources Committee. The Commission, therefore, was very happy to procure his services to present this phase to your committee, and Mr. Chairman and members of the committee, I present Dr. Montgomery and he will present to you certain historical, statistical, and financial matters and certain monopolistic practices in that industry.

The CHAIRMAN. Do you solemnly swear the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Dr. MONTGOMERY. I do.

Colonel CHANTLAND. Doctor, will you state for the record your name and address?

**TESTIMONY OF DR. R. H. MONTGOMERY, PROFESSOR OF ECONOMICS,
UNIVERSITY OF TEXAS, AUSTIN, TEX.**

Dr. MONTGOMERY. R. H. Montgomery, University of Texas, Austin, Tex.

Colonel CHANTLAND. What is your profession, Doctor?

Dr. MONTGOMERY. Professor of economics.

Colonel CHANTLAND. How long have you been in that line?

Dr. MONTGOMERY. About 20 years.

Colonel CHANTLAND. Have you for a number of years last past made some special study of sulfur?

Dr. MONTGOMERY. Yes. For several years, about 16 or 17 years, I have been working in the general field of the relation of govern-

ment to monopoly industries, and, of course, that has led me into some study of sulfur. In addition, I have worked for the past 2 years as consultant to the National Resources Committee on the ownership and operation of the natural resources of Texas. I have prepared a study for them which included a study on sulfur.

Colonel CHANTLAND. Are you at present under retainer as consultant by that committee?

Dr. MONTGOMERY. I am.

Colonel CHANTLAND. Your study of sulfur has been along economic rather than on technical production lines.

Dr. MONTGOMERY. It has.

Colonel CHANTLAND. And it is on that line you are going to speak more particularly?

Dr. MONTGOMERY. Yes, sir.

Colonel CHANTLAND. Will you now begin, Doctor, and give us at the outset some statement more definite than I did as to the physical characteristics, the chemical situation, and the importance of sulfur?

The CHAIRMAN. Before you proceed to that, may I ask you how you approached this study of sulfur?

Dr. MONTGOMERY. I don't quite understand.

The CHAIRMAN. How did you approach it? What are the sources of the information that you are about to give us?

Dr. MONTGOMERY. The sources of the information that I will give this committee this morning have been provided to me by the Federal Trade Commission, by previous studies, particularly with National Resources Committee. I have relied upon the reports of the companies themselves.

The CHAIRMAN. Where did you receive these reports?

Dr. MONTGOMERY. From Moody's Manual, Poor's Manual, and from the tax office of the State of Texas. The companies report to the State of Texas; they pay a gross-production tax.

The CHAIRMAN. So you are presenting to us the conclusions which you have reached from a study of the public-tax returns of certain companies to the State of Texas and from these other reports, material furnished by them to Moody's Manual?

Dr. MONTGOMERY. And from the reports furnished to the Federal Trade Commission by the companies themselves. That is my primary source.

The CHAIRMAN. In what connection were those reports submitted?

Dr. MONTGOMERY. In connection with this study, some of them.

Colonel CHANTLAND. Those were at our request, Mr. Chairman. We have them here and will present them.

The CHAIRMAN. You may proceed.

Dr. MONTGOMERY. I should like to submit first 10 tables as exhibits.

(Dr. Lubin assumed the Chair.)

Colonel CHANTLAND. I now then offer tables 1 to 10, which will be identified as sulfur exhibits 1 to 10, Federal Trade Commission.

Acting Chairman LUBIN. Without objection; they will be put into the record.

Mr. DAVIS. You mean for those to be printed?

Colonel CHANTLAND. Yes; we desire for those to be printed in the record.

Acting Chairman LUBIN. If there is no objection, it will be done.

(The tables referred to were marked "Exhibits Nos. 371 to 380," both inclusive, and are included in the appendix on pp. 2200-2206.)

Colonel CHANTLAND. You have my question, Doctor. You may proceed.

IMPORTANCE OF SULFUR AND SULFURIC ACID

Dr. MONTGOMERY. The best authority that I know in this field in the United States has made this simple statement, which I should like to read into the record, just one paragraph, and very short:

Sulfuric acid is the most basic of all chemical products. There is scarcely a manufactured product known in the preparation of which either of the raw material or in the actual process of making the article sulfuric acid does not play a part.

Acting Chairman LUBIN. Will you quote the source of that statement, please?

Dr. MONTGOMERY. From Theodore J. Kreps' book on sulfuric acid.¹

Sulfuric acid, I believe, is the narrowest and at the same time most vital bottle neck of modern industry. I have a list here, which will be extended in the tables just submitted, indicating the importance in some of our basic industries.

Colonel CHANTLAND. Doctor, you have spoken of sulfuric acid, and we are talking about a sulfur study. Please relate those.

Dr. MONTGOMERY. Over 70 percent of the sulfuric acid of the United States is produced from natural sulfur or brimstone. Approximately 85 percent of all of the sulfur produced in the United States is used in the manufacture of sulfuric acid.

Acting Chairman LUBIN. Do you have any figures showing the trend of production of sulfuric acid from various sources, namely, whether or not more or less of sulfuric acid is being produced from sulfur direct?

Dr. MONTGOMERY. Yes; that is table No. 2 in our exhibits, indicating the sources of sulfuric acid.

The fertilizer industry took approximately 2,000,000 tons of sulfuric acid in 1937; petroleum refining, 1,200,000; chemicals, over 1,000,000 tons; coal products, iron and steel, metallurgical, paints, and pigments each took over 500,000 tons. There are many others, including the refining of gasoline, the manufacture of rayon, of cellulose film, most cotton textiles, explosives, which use large amounts, usually between 100,000 and 500,000 tons per year.

Sulfuric acid, and back of that brimstone, is probably the most vital single military product, or product to be used in war for war purposes. Every pound of smokeless powder manufactured requires 2.3 pounds of sulfuric acid; every pound of TNT requires 2.2 pounds of the acid, and every pound of picric acid requires 6.5 pounds of sulfuric acid.

In 1937, 70 percent of the sulfuric acid was made from brimstone. Approximately 85 percent of brimstone or natural sulfur was used in the production of sulfuric acid. The industry has been closely monopolized for approximately 42 years. In 1896 the Anglo-Sicilian Sulphur Co., of England, secured a controlling interest in approximately 85 percent of the Sicilian output. That control was held by the Anglo-Sicilian Co. from 1896 to 1906.

(Senator O'Mahoney resumed the Chair.)

¹ Dr. Kreps is economic consultant to the committee. The title of the book is *Economics of the Sulfuric Acid Industry*.

SOURCES, PRODUCTION AND METHODS OF PRODUCING SULFUR

The CHAIRMAN. What are the sources of the production of sulfur in its natural state?

Dr. MONTGOMERY. There are primarily, throughout the past 40 years, two sources, one of them the Sicilian sulfur mines, where sulfur is mined very much as coal or iron is mined in this country, and deposits along the Gulf coast in Texas and Louisiana, where the sulfur is mined by the Frasch process, which I shall describe in just a moment.

The CHAIRMAN. I have before me the Minerals Yearbook of 1938, which would indicate that the United States, in 1933, produced 1,406,063 long tons, and that the next highest production was from Italy, which I assume is from Sicily, 370,676 long tons; and that Japan comes third with only 112,619; Spain next with 27,128—no, Chile is above Spain, with 112,558 long tons. What are the sources of supply in the United States?

Dr. MONTGOMERY. May I point out one thing before I answer your question, Senator, and that is that 1933—I believe those are the figures?

The CHAIRMAN. Yes; I was reading from the first column.

Dr. MONTGOMERY. That is the lowest American production except for 1 year in the past 20 years.

The CHAIRMAN. Yes; the production for 1937 was 2,741,907.

Dr. MONTGOMERY. Yes, sir. Now, to answer your question as to the source of American production, all of that comes from two States, Texas and Louisiana.

The CHAIRMAN. What is the extent of the deposits, the physical deposits?

Dr. MONTGOMERY. That is very difficult to answer. Sulfur is found in its natural state in connection with what we know as the salt domes. There seem to be some 60 or 70 of those on the Gulf coast. How many of them contain sulfur in commercial quantities is not known at present. At present there are only 6 plants producing sulfur.

The CHAIRMAN. There are no substantial deposits of sulfur upon the public domain in the United States, are there?

Dr. MONTGOMERY. No, sir; not so far as is known, at least no deposits from which sulfur can be secured by the Frasch process.

The CHAIRMAN. Now, with respect to Texas, were any of these deposits owned by the State of Texas?

Dr. MONTGOMERY. No, sir; so far as I know. I believe none of them were.

The CHAIRMAN. As far as your studies have gone, the actual ground from which the sulfur is mined has been in private ownership all the time.

Dr. MONTGOMERY. Yes, sir.

The Frasch process, patented by Mr. Herman Frasch, a chemist for the Standard Oil Co. in 1891, involves the forcing of superheated steam, steam at approximately 220° and under tremendous pressure, approximately 6 atmospheres, into an inert deposit of natural sulfur or brimstone. The sulfur is melted and then is pumped out of the ground in a liquid form. The process was not immediately put into

use when discovered by Mr. Frasch because of the difficulty of securing fuel for heating water and operating pumps.

In 1902 the discovery of oil at Spindle Top, Tex., near the then known sulfur deposit, gave him a cheap fuel. In 1903 the Union Sulphur Co. was reorganized to exploit that deposit, using the Frasch process, using crude oil as its fuel.

Until 1903 Union Sulphur Co. produced 85,000 tons. The next year 200,000 tons were produced. By 1908 about 800,000 tons per year were produced by that one company, and their production stayed at approximately that figure, sometimes going as high as 1,000,000 tons per year, until the dome was exhausted in 1924.

In 1906 the Anglo-Sicilian monopoly became tremendously excited about this new process of producing sulfur.

The CHAIRMAN. Were the deposits in Sicily concentrated as they are in the United States?

Dr. MONTGOMERY. Not by any means, Senator, and the Frasch process cannot be employed in Sicily at all on their deposits. The use of this process is determined by certain physical characteristics of the deposits. All of the known deposits which have been exploited by this method have been between 400 and 1,400 feet under the surface of the ground. In the Gulf coast area the sulfur deposit being found in a porous limestone rock formation with an overlay of several hundred feet of what we call sea mud. Essentially in using this process the surrounding ground must collapse the rock structure in order to permit the extraction of the melted sulfur in liquid form.

In 1906 the Italian Government sent a commission to Louisiana to study the process of extraction. That commission reported that Union Sulfur Co. could supply the American market at a cost of approximately 40 lire per long ton or about \$7.72. In 1906 the Italian Government organized a consorzio, a pool of all the sulfur producers in Sicily, and the next year an agreement was made by it with Union Sulfur Co., known as the Consortium of 1907.

The CHAIRMAN. You say the Italian Government organized this pool?

Dr. MONTGOMERY. Yes.

The CHAIRMAN. Under what sort of authority?

Dr. MONTGOMERY. I do not know the authority. I might amend that statement by saying that so far as our records showed in the Commission office the Government was instrumental in organizing and proceeded—and has for almost every year since 1906—to subsidize the production of sulfur in Sicily.

The CHAIRMAN. The inference to be drawn from your statement is that the Italian Government as a matter of policy undertook to bring about a combination of the producers of sulfur.

Dr. MONTGOMERY. It would be my opinion that that is a correct statement. Mr. Frasch, in accepting a medal in 1911, referred to the "law creating this obligatory trust," and "a trust created by force, which all those engaged in that particular business are obliged to join."

The CHAIRMAN. So that if there were a monopoly, to use the word that is so frequently bandied about here, of sulfur in Italy, it was by the promotion of the Government that it was made effective.

Dr. MONTGOMERY. I think that is correct also. Between this Sicilian trust and the Union Sulphur an agreement as to European and American markets was made early in 1907. We have not been able to procure a copy of it. If secured, it will be presented. Prior to 1906, more than three-fourths of the Sicilian sulphur had been controlled by the Sicilian Sulphur Co. (Ltd.) of London.

I should like at this point to introduce a copy of the contract between Sulfur Export Corporation and the Italian Consortium dated, March 14, 1923.

The CHAIRMAN. I think it might very well be presented for the records of the committee. My suggestion merely was that it may not be necessary to burden the printed record with it if you would be good enough to state the substance of it.

(The contract referred to was marked "Exhibit No. 381-A" and is included in the appendix on p. 2214.)

Dr. MONTGOMERY. The substance of that contract is that the Export Corporation was given the North American market with the outlying islands and 50 percent of the European market. The price at which sulfur was to be sold in the European market was determined by agreement between Consorzio and the Corporation.

The CHAIRMAN. What is the source of this contract? Where did you get it?

Dr. MONTGOMERY. From the records of the Federal Trade Commission.

The CHAIRMAN. Under the Webb-Pomerene Export Trade Act?

Dr. MONTGOMERY. Yes.

The CHAIRMAN. So that this is a contract which was filed by the companies concerned.

Dr. MONTGOMERY. Yes; filed by—that is incorrect, the later revisions of it, one of which I should like to submit, if we may, for the written record; there have been three such.

The CHAIRMAN. Of course, the Webb-Pomerene Act was a statute passed by Congress which in effect repealed the antitrust law so far as foreign trade is concerned. In other words, corporations or persons were given the authority to make combinations in restraint of trade so far as export trade was concerned.

Dr. MONTGOMERY. Yes, sir.

Mr. DAVIS (interposing). Providing that it did not affect commerce in the United States.

The CHAIRMAN. That was rather an expression of a hope. Yes.

Colonel CHANTLAND. Senator, let the record be clear that the first Sicilian contract of 1907 that the doctor has referred to was long before the Webb-Pomerene Act.¹ The Webb-Pomerene Act was passed in wartime.

Mr. DAVIS. The first one he spoke of?

Colonel CHANTLAND. A later 1934 agreement is what the doctor now asks to be introduced,² and I offer it with the idea that it need not be printed unless committee should so desire.

The CHAIRMAN. Of course, when Congress passed the Webb-Pomerene Act it was giving its absolution to that policy of combination in export trade.

¹ "Exhibit No. 381-B," appendix, p. 2217.

² Admitted to the record, *infra*, p. 1991.

Colonel CHANTLAND. It was a question of meeting what they called the foreign cartels, where the Government did back them up, and the plea was that we couldn't do much against them unless we did something of that sort.

The CHAIRMAN. In other words, this is merely an illustration of why this committee is in existence, studying the very diverse methods which have been adopted by this country and by other countries in dealing with the production and distribution of the commodities which go into our economic life.

Mr. DAVIS. If you will pardon me, Mr. Chairman, I think that it might be a little clearer to state that the Webb-Pomerene Act, as you suggested, removed any inhibition that might exist under the antitrust statutes with respect to purely export sales. As a matter of fact, we don't think that the antitrust laws applied to those anyway, but it was thought by some that perhaps it should be specifically stated, and, of course, under that act they not only have no right to make any agreement or enter into any conspiracy or course of action which would restrain trade in the United States or affect prices in the United States, but their course of conduct with respect to export agreements and export sales shall not have any such effect in the United States.

The CHAIRMAN. Yes, Judge Davis, I understand that to be the theory upon which that law was drafted. The question which presents itself to the mind of a person who studies this problem, however, in the light of the ease of communication throughout the world is whether or not a combination that affects the world price and which is authorized by law can in any way be prevented from affecting the domestic price and the domestic distribution. But that, of course, is merely a question. I am offering no opinion on the matter. I am just suggesting the inquiry that might be made.

Mr. DAVIS. I took the liberty of making that statement because the Federal Trade Commission knows that there is frequent confusion on that subject in the public mind, and we do everything we can to make clear the purpose and policy of the Webb-Pomerene Act, just what it permits and what it doesn't permit.

The CHAIRMAN. Of course, that is not the only law of Congress which undertook to repeal the provisions of the antitrust law with respect to certain kinds of traffic. There is, for example, the Shipping Act of 1916, the so-called Jones Act, and later the Merchant Marine Act, the purpose and intent of which was to permit shipping companies to make combinations and to fix rates, divide territory, and do all—not all, but many of the things which we were taught to condemn as bad for ordinary trade when we were considering laws like the Sherman antitrust law.

Mr. BERGE. I am not real clear as to all the details of the Webb-Pomerene Act, but I was wondering whether it was plain that this agreement was lawful even under that. Does the Webb-Pomerene Act go so far as to permit agreements to be entered into for territorial division of markets throughout the world? Is it lawful for an American company to enter into agreements with foreign concerns for division of territory in making sales and do what apparently your agreement does?

Dr. MONTGOMERY. I should have to refer that question, of course, to the lawyers. I am an economist.

Colonel CHANTLAND. Mr. Berge, Dr. Montgomery will tell the facts about that, and, of course, the final proposition will be up to the committee as to what effect it has.

The CHAIRMAN. Of course, the Webb-Pomerene Act is enforced by the Federal Trade Commission. Has the Federal Trade Commission ever brought any proceedings with respect to sulphur?

Colonel CHANTLAND. It has not. It has made one study, I think, that is one memorandum some number of years ago, but in recent years, that is in the last 5 years, it has not, but the doctor will set forth what the facts are as they have been found.

Is the 1934 edition of this Sicilian agreement which was made with the Export Corporations received?

The CHAIRMAN. Oh, yes.

Colonel CHANTLAND. I should like, at this time, to have introduced a copy of the 1923 agreement as well.

The CHAIRMAN. They are both received. You may proceed, Dr. Montgomery.

(The agreements referred to were marked "Exhibits Nos. 381 and 381-A," respectively, and are included in the appendix on pp. 2208 and 2214, respectively.)

Dr. MONTGOMERY. From 1906 until 1913, the original Frasch patents apparently prohibited or prevented any other company from entering the field. The Freeport Sulphur Co. was organized in 1908. The Union Sulphur Co. immediately sued for infringement of patent. That suit was ultimately decided in 1919, at which time all of the patents were declared null and void by the Federal circuit court, Judge Buffington's decision, in the Philadelphia circuit.

In 1913 the Freeport Sulphur Co. began to produce. Within 2 or 3 years it was producing approximately half a million tons per year, a large enough volume to furnish real competition for Union in the American market. However, the war created a tremendous demand for sulfur. The use of sulfuric acid in the manufacture of explosives increased from approximately 150,000 tons pre-war to 2,700,000 in 1 year, 1918. The War Industries Board and the military authorities became interested in 1917 for fear we wouldn't have an adequate supply of sulfuric acid for war purposes. In 1918 they allocated the uses of sulfur, requiring both companies to keep at least half a million tons of sulfur above ground at their mines. In 1918 the Texas Gulf Sulphur Co. was organized, and in 1919 began production at Bryan Mound, which is one of the richest deposits that has been discovered up to the present time.

SULFUR PRICES AND PROFITS

Dr. MONTGOMERY. At the end of the war America's capacity to produce had been trebled. The depression, the slight depression of 1919 and the larger depression of 1920-21, reduced the demand for sulfur by more than 50 percent.

Apparently a price war developed for approximately 1 year. The price of sulfur was reduced from \$22 a ton f. o. b. the mines, where it had been set by the War Industries Board in 1918, to \$16.50 a ton, then \$14.50, then \$12.50 per ton. In that situation in 1922 the Sulphur Export Corporation was formed by the three companies then engaged in producing sulfur, Union Sulphur Co., of Louisiana; the Texas Gulf Sulphur Co., of Texas; and the Freeport Sulphur Co.,

of Texas. I should like to ask permission to submit as an exhibit the agreement by which the Sulphur Export Corporation was formed under the Webb-Pomerene Act of 1922.

The CHAIRMAN. This agreement is taken from the files of the Federal Trade Commission?

Dr. MONTGOMERY. It is.

The CHAIRMAN. It may be accepted.

(The agreement referred to was marked "Exhibit No. 382" and is included in the appendix on p. 2226.)

Colonel CHANTLAND. As I understand it, the committee asked us to submit those. The committee asked for them. The Commission will produce them on their request.

At the same time, perhaps we should add to that the agreement at the time the Union ceased producing, in which their place was taken by another company.

The CHAIRMAN. Very well; it may be so ordered.

(The agreement referred to was marked "Exhibit No. 383" and is included in the appendix on p. 2235.)

Dr. MONTGOMERY. Under that agreement—

Colonel CHANTLAND (interposing). Pardon me. What we are offering, Mr. Chairman, in response to this request are the certificates of incorporation of the Sulphur Export Corporation, the bylaws and the agreement between the companies, plus the subsequent agreement at the time the Union ceased producing.

Mr. BLAISDELL. Was this agreement entered into under the Webb-Pomerene Act?

Dr. MONTGOMERY. It was.

The stock of the Sulphur Export Corporation was divided between the three companies in this ratio: Union Sulphur, 37.5 percent; each of the others, 31.25 percent; and they agreed to divide the export business in the same ratio.

In 1924 Union Sulphur quit producing, having exhausted their deposits, but having a tremendous inventory of sulfur above ground continued to ship until 1928, at which time Union withdrew from the production of sulfur and from the Sulphur Export Corporation, selling its stock in the Sulphur Export Corporation to the other two companies on a 50-50 basis.

Colonel CHANTLAND. What companies were those?

Dr. MONTGOMERY. Freeport Sulphur Co. and the Texas Gulf Sulphur Co., the two companies agreeing to divide export business in the ratio of 50-50, where it has remained with minor exceptions to the present time.

Since 1924 Freeport Sulphur Co. and Texas Gulf Sulphur Co. have produced on an average over 94 percent of the total production in the United States.

Mr. BALLINGER. What happened to the price of sulfur at the time this corporation was formed; I mean, this export agreement was entered into?

Mr. MONTGOMERY. The price of sulfur, which had declined very sharply, was raised to approximately \$18 per ton f. o. b. the mines, and it has remained at approximately that figure—at exactly that figure—for some 10 years down to the present time.

Colonel CHANTLAND. You mean for the prime grade. There have been reductions for off-color and off-grade sulfur.

Mr. BALLINGER. You mean \$18 a ton for sulfur sold domestically in the United States?

Dr. MONTGOMERY. Yes.

Mr. BALLINGER. How about the price of sulfur sold abroad?

Dr. MONTGOMERY. It has been figured apparently on the price of \$18 per ton f. o. b. the mines plus freight, insurance, and other costs of shipment.

I should like to amend that statement in this way: It might be better to say that the export price of sulfur has been set, as it has, by agreement with the Sicilian producers.

(Dr. Lubin assumed the Chair.)

Acting Chairman LUBIN. You said a minute ago that under the agreement with the Sicilian producers, the markets of the world have been allocated between the American export group and the Sicilian producers, which means in effect, then, that this export price is applicable only in those limited markets, namely the North American continent and certain islands contiguous to the continent.

Dr. MONTGOMERY. You mean that \$18 per ton f. o. b. the mine? Yes. The prices to the foreign markets are, of course, affected by distance, difficulty of shipment, and things of that sort.

Acting Chairman LUBIN. Under this agreement we have no foreign markets. I understood you to say the territory has been divided in such a way that the American producers have only the North American Continent and certain contiguous islands.

Dr. MONTGOMERY. Not at all. We have supplied approximately 75 percent of the world market outside of the North American Continent. The North American Continent and the outlying islands are retained for the American producers exclusively, and most of the time, I believe with the exception of 1 year, the Italian market has been retained by the Sicilian producers, but the rest of the world market has been divided with the American producers supplying some 75 percent of the world market.

Mr. TUPPER. How large a proportion of our total production is exported?

Dr. MONTGOMERY. That is shown for different years. Of course, it varies. It is shown in the exhibits that have already been introduced. We can get from that the exact percentages of each year.

Mr. TUPPER. What is the approximate proportion in a recent year?

Dr. MONTGOMERY. In 1937, out of a production of 2,467,000 tons, we exported 644,000. The percentage, I think, has been larger than that on the average for the past 20 years, averaging approximately 25 percent.

During the past 10 years two very small sulfur producers have appeared in the United States, Jefferson Lake Oil Co. and the Duval Sulphur Co. During a few of the past 10 years, part of the export market has been allocated by the Sulphur Export Corporation to these two new producers.

Colonel CHANTLAND. I now desire to offer four documents, three addressed to the Duval Texas Sulphur Co., from the Sulphur Export Corporation, and one to the Jefferson Lake Oil Co., from the Sulphur

Export Corporation, being the documents to which the witness is referring. May they be received? We ask that these be printed in the record. They are very short.

(The documents referred to were marked "Exhibits 384 and 385" and are included in the appendix on pp. 2236-2238.)

Colonel CHANTLAND. These are also from the Federal Trade Commission's files on sulfur, received, as the other information has been, from the Export Corporation. They come direct from the Export Corporation.

Mr. DAVIS. That is what I was going to suggest. Tell where the Federal Trade Commission got them.

Colonel CHANTLAND. I have done so.

Dr. MONTGOMERY. In addition there has been developed within the past 10 years a new process for extracting raw sulfur from pyrites. The patents on that process were obtained by a Norwegian company. For the past 5 years the Sulphur Export Corporation of the United States has allotted to the Norwegian company, Orkla Grube, A. B., usually referred to as Orkla, approximately 70,000 tons per year of its part of export or world-market sulfur.

Acting Chairman LUBIN. May I interrupt at that point? Is that sulfur being produced under Norwegian patents being produced in the United States?

Dr. MONTGOMERY. Not at all. The Texas Gulf Sulphur Co. holds the patent on that process for the United States, and I believe for the whole Western Hemisphere. The Texas Gulf Sulphur Co. has secured options on and leases on deposits from which sulfur may be produced, or which they think sulfur may be produced in both Newfoundland and Peru. I assume from that that they hold the patents on the process for the entire Western Hemisphere.

By this contract with Orkla, Orkla is effectively prevented from either expanding its own production or leasing patent rights to anyone else in the world outside of the Western Hemisphere.

Acting Chairman LUBIN. This proportion of the output that has been allocated to Orkla, where is it being produced?

Dr. MONTGOMERY. In Norway, and the allocation specifies that the sulfur is to be sold only in Scandinavia and Finland by Orkla.

Mr. BALLINGER. Doctor, I would like to go back a little bit to the picture you have been drawing here for the committee. Following a rather vigorous price war in the sulfur industry, the companies entered into this export agreement?

Dr. MONTGOMERY. That is correct.

Mr. BALLINGER. And then the price of domestic sulfur was immediately raised——

Dr. MONTGOMERY (interposing). That is correct.

Mr. BALLINGER. And it stood stationary for how many years?

Dr. MONTGOMERY. According to my records, for the past 17 years it has varied slightly for about 2 of those 17 years, being from 1926 down to October 1938. The price remained absolutely stationary at \$18 per ton except for 2 years. In one of those years the price varied by 3 cents per ton from \$18; in the other year it varied by 2 cents per ton.

Mr. DAVIS. Well, now, you stated that there has been a break in the price, or a sharp decline. What was the extent of that decline, and in what year did it occur?

Dr. MONTGOMERY. In 1919 the price declined, the average price, for the best grade of sulfur, at the mine, about \$2.50 per ton.

Colonel CHANTLAND. The war price had been what?

Dr. MONTGOMERY. Twenty-two dollars per ton. In 1925 the price again declined by approximately \$2.50 per ton.

Mr. DAVIS. Declined from what price?

Dr. MONTGOMERY. From \$18 per ton f. o. b. the mine.

Mr. DAVIS. Well, now, that was subsequent to the approval of the original export trade agreement, was it not?

Dr. MONTGOMERY. Yes; it was.

Mr. DAVIS. To what do you attribute that decline in 1925, if you have any knowledge or information?

Dr. MONTGOMERY. I do not have knowledge from which I could state positively at all.

Mr. DAVIS. Well, now, when you refer to the price at the mine in different years mentioned, do you refer to the price to everybody, including American buyers as well as foreign buyers?

Dr. MONTGOMERY. Whether foreign buyers get their sulfur at \$18 f. o. b. the mine or not is impossible to state from the records. The price, however, does apply to their first quality of sulfur, the true yellow, pure sulfur, to all American buyers, regardless, apparently, of quantity or distance from the mine.

Mr. TUPPER. Have we ever imported any sulfur?

Dr. MONTGOMERY. We imported approximately one-third of world production until the opening of the Union Sulfur Co.'s mine in Louisiana. We were at that time importing approximately one-third of the total Sicilian production. Since 1906 our sulfur imports dropped, of course, immediately, to zero, or almost zero, where they have remained during the past 32 years.

Mr. TUPPER. In this price war of 1921 there wasn't any problem of competition from abroad?

Dr. MONTGOMERY. None whatever, so far as one can tell from the records.

Acting Chairman LUBIN. May I ask just one question relative to the \$18 price? You say that during this period of years the maximum variation has been about 3 cents in any 1 year. That is the quoted f. o. b. price?

Colonel CHANTLAND. On prime sulfur.

Dr. MONTGOMERY. For prime sulfur, from the report of the companies there, their own reports on prices.

Now, prices for other grades: There is some of the sulfur that has a little bit of oil in it; it is off color; it cannot be used for medicinal purposes, on which the price is slightly lower.

Colonel CHANTLAND. Doctor, may I interrupt here to complete the introduction into the record as to the taking over of the business of the Union by the other companies, Texas and Freeport, which has been marked as an exhibit, and at the same time offer the copy of the Orkla, the Norwegian, agreement, to which the witness has referred, and I ask that both of these be printed as a part of the record.

(The exhibits referred to were marked "Exhibits Nos. 386 and 387" and are included in the appendix on pp. 2238-2240.)

Mr. O'CONNELL. Dr. Montgomery, early in your testimony, as I recall it, you indicated that at the time of the development of this

American process, the Frasch process, you said it was determined that the cost of production of sulfur, using that process, was about one-third of the cost of production by the other processes as used in Sicily, and it seems to me you also said it was determined at that time that the cost of production by the American process was about \$7.72 per long ton. Is that correct?

Dr. MONTGOMERY. That is the report made by the Italian Commission, that sulfur made under that process could be sold anywhere in the American market at that price.

Mr. O'CONNELL. Would you happen to know whether that differential, that is, as to the American process costing only about one-third that of the foreign, would exist today?

Dr. MONTGOMERY. I do not know. In my opinion there is a very great differential in cost.

Mr. O'CONNELL. But I also understood you to indicate that in all probability the price charged by American producers in the foreign market was about the same as the domestic price, \$18 a ton. Is that right?

Dr. MONTGOMERY. Plus freight, insurance, and other costs of shipment.

Mr. O'CONNELL. Well, in the foreign market there isn't merely competition as between the American producers and the foreign producers, is there? I gathered there is something in the nature of allocation of business.

Dr. MONTGOMERY. Complete allocation, apparently to the last individual ton for the entire world market, so much so that the penalty attached to a violation of that agreement by either party to the agreement involves the loss of the sale during the next year of 2 tons of sulfur.

Colonel CHANTLAND. For every one.

Dr. MONTGOMERY. For every one ton sold in violation of the agreement on allocation.

Mr. O'CONNELL. You wouldn't know whether the cost of production in Sicily was a determining factor in arriving at the price at which sulfur is sold in the world market outside of the United States, would you?

Dr. MONTGOMERY. I couldn't answer that question.

Mr. O'CONNELL. But it is apparently substantially the same price, taking into consideration cost of transportation, as in the United States.

Dr. MONTGOMERY. And taking into consideration the fact that the Sicilian producers have been subsidized by the Italian Government.

Dr. CHANTLAND. Doctor, Mr. O'Connell has brought out the proposition of the report of the Italian Commission on American costs at a certain date. We have other data as to cost here in America.

Dr. MONTGOMERY. Oh, yes.

Colonel CHANTLAND. Which shows that, Mr. O'Connell, it is considerably below that picture.

Dr. MONTGOMERY. In fact, all of the cost data of which I shall submit during my testimony here indicate a cost of production much lower than \$7.72.

Colonel CHANTLAND. State the figure approximately, and we will put the facts in later. State them approximately.

Dr. MONTGOMERY. Approximately \$6 per ton. I shall later on submit a detailed statement of cost of production.

Acting Chairman LUBIN. I should like to clarify for my own mind at least just what this international situation is like. As I understand it, certain markets have been reserved for the American producers; and I take it certain markets have been reserved for the Italian producers.

Dr. MONTGOMERY. That is correct.

Acting Chairman LUBIN. The rest of the world is a free market for both groups.

Dr. MONTGOMERY. Right.

Acting Chairman LUBIN. Is there any evidence of any arrangement between the American and Italian producers as to what price they will call in these free markets?

Dr. MONTGOMERY. That is determined between the Sulphur Consortium and the Sulphur Export Corporation.

Acting Chairman LUBIN. Is that stated in the agreement?

Dr. MONTGOMERY. Yes.

Acting Chairman LUBIN. So that the actual price of sulfur sold in the international market, at least that portion which is free, is fixed in the agreement between the Italian Consorzio and the Sulphur Export Corporation?

Dr. MONTGOMERY. That is shown in the exhibits which we have already introduced.

Colonel CHANTLAND. At this time I will ask Dr. Montgomery to step aside a moment and ask Mr. A. E. Lundvall to be sworn, because we are coming to another branch.

Mr. BLAISDELL. Mr. Chairman, before he leaves the stand may I ask him one or two questions to clarify the situation in my own mind? As I understand it, there was a date shortly after the war when there was a severe price war in the industry.

Dr. MONTGOMERY. Yes.

Mr. BLAISDELL. At that time an agreement was made with the foreign producers which had the effect of stabilizing the price.

Dr. MONTGOMERY. Yes; in my opinion, that is entirely correct.

Mr. BLAISDELL. In 1925 again a similar situation arose in spite of the agreement.

Dr. MONTGOMERY. Yes.

Mr. BLAISDELL. A new agreement was then entered into which had essentially the same effect of reestablishing new terms of agreement.

Dr. MONTGOMERY. So far as I know, there was no new agreement made in 1925 either between the Sulphur Export Corporation and the Sicilian producers or between the producers in this country. I consequently cannot state as of my own knowledge the reason for the stability of prices from 1925 to the present time. For some reason, the price of sulfur after that break in '25 became absolutely stationary. According to the report made by the Texas Gulf Sulphur Co. to the Federal Trade Commission on their request, during this investigation it has not varied a penny since '26.

Mr. DAVIS. Dr. Montgomery, how long did the variation in prices in 1925 continue?

Dr. MONTGOMERY. Apparently for 1 year only. During 1 year the break was great enough to pull the average for that year down by some \$2.50 per ton.

Mr. DAVIS. Do you not think that there was a natural fluctuation more or less following the World War of prices in this industry, just as there was in nearly all industries—becoming readjusted from war prices to a peacetime basis?

Dr. MONTGOMERY. Yes; certainly; plus the fact that this industry, because of the entrance of a new company, Texas Gulf Sulphur Co., with the largest plant in the industry, with the largest plant the industry had even known, plus the fact that the Freeport Sulphur Co. had more than doubled its production by opening a new mine, gave us a trebled production of sulfur as against pre-war years. That plus the business depression of 1920, '21, and the slight recession of '25 may be entirely responsible for the break in price which is indicated.

On the other hand, it might be pointed out that the business depression from 1929 down to 1939 has not had that effect. The price of sulfur has not been depressed during the past 10 years.

Mr. DAVIS. Has it varied any during the past 10 years?

Dr. MONTGOMERY. None whatsoever except 3 cents apparently 1 year and 2 cents 1 year.

Colonel CHANTLAND. Up to what time.

Dr. MONTGOMERY. Up to October 1938.

Mr. O'CONNELL. Dr. Montgomery, the first break in the price that you spoke of as occurring directly after the war was prior to the consolidation of the theretofore competing companies in the domestic market, was it not?

Dr. MONTGOMERY. It was prior to the formation of the Sulphur Export Corporation under the Webb-Pomerene Act in 1922.

Mr. O'CONNELL. This corporation that was created, is it a holding company?

Dr. MONTGOMERY. Not at all. It is an export corporation organized under the Webb-Pomerene Act.

Mr. O'CONNELL. Does it hold the stock of the companies?

Dr. MONTGOMERY. As far as I know, not a share. The companies own its stock.

Acting Chairman LUBIN. Did you say that there had been an agreement in effect before the Webb-Pomerene Act.

Dr. MONTGOMERY. Not an agreement between the American producers but an agreement between the Union Sulphur Co., the only American producer in 1907, and the Italian Consorzi.

Acting Chairman LUBIN. Before you leave the stand, I would like to ask one more question. You made the comment in the introduction to your testimony relative to the importance of sulfur, particularly in the form of sulfuric acid to the modern economy, and among the items you mentioned in which sulfuric acid was used was fertilizer. Have you any idea as to how much sulfur in the form of sulfuric acid is used in production of a ton of fertilizer?

Colonel CHANTLAND. Dr. Lubin, with all due respect, we are just letting him step aside in order to introduce something that he will use later. He will get to that a little later on. I didn't mean he was stepping aside permanently, but just to get in something that we need.

Mr. Lundvall, will you be sworn?

Acting Chairman LUBIN. Do you solemnly swear to tell the truth, the whole truth, and nothing but the truth in these proceedings, so help you God?

Mr. LUNDVALL. I do.

TESTIMONY OF ARTHUR E. LUNDVALL, ECONOMIST AND ACCOUNTANT, FEDERAL TRADE COMMISSION, BALTIMORE, MD.

Colonel CHANTLAND. Give your name and residence to the reporter.

Mr. LUNDVALL. Arthur E. Lundvall; residence, Baltimore, Md.

Colonel CHANTLAND. What is your business?

Mr. LUNDVALL. I am a certified public accountant, employed by the Federal Trade Commission.

Colonel CHANTLAND. How long have you been thus employed by the Federal Trade Commission?

Mr. LUNDVALL. For about 10 years.

Colonel CHANTLAND. Did you take quite a large part in preparing many financial and accounting reports during our 8 years of Utility Investigation directed by the Senate?

Mr. LUNDVALL. I did.

Colonel CHANTLAND. You prepared a good many reports?

Mr. LUNDVALL. Yes.

Colonel CHANTLAND. Some of them rather complicated, I take it.

Mr. LUNDVALL. They were.

Colonel CHANTLAND. On this sulfur proposition, at my request, did you go to the Texas Sulphur Co. and to the Freeport Co. to get and check certain financial data touching investments and earnings and results?

Mr. LUNDVALL. I did. Mr. Crabtree and I—

Colonel CHANTLAND (interposing). He is one of your associate accountants?

Mr. LUNDVALL. He is. We were in New York for a short time, obtaining figures which are the basis for a discussion of the investments, profits, and rates of return for the Texas Gulf Sulphur Co. and the Freeport Sulphur Co.

Colonel CHANTLAND. And as a result of that investigation and figures received in that manner from the companies have you prepared a report on each?

Mr. LUNDVALL. Yes, sir.

Colonel CHANTLAND. I show you now a binder on the face of which is stated: "Federal Trade Commission; Financial Report Including Investments, Profits, and Rates of Return for Texas Gulf Sulphur Co. for the Temporary National Economic Committee." Is that the original of your report on the Texas Co. arrived at in the way you said?

Mr. LUNDVALL. It is.

Colonel CHANTLAND. I show you now the original of a report stating on its facing sheet: "Federal Trade Commission; Financial Report Including Investments, Profits, and Rates of Return for the Freeport Sulphur Co., Temporary National Economic Committee." I ask you if that is the original of your report on the Freeport Co. gathered in the way you said?

Mr. LUNDVALL. It is.

Colonel CHANTLAND. Are the facts herein stated accurately stated and the results stated in accord with good accounting practice?

Mr. LUNDVALL. I think so.

Colonel CHANTLAND. Well, by "think so," what do you mean?

Mr. LUNDVALL. To the best of my knowledge and belief.

Colonel CHANTLAND. Based on your experience?

Mr. LUNDVALL. Based on my experience; they represent the actual investments and correct earnings of the companies.

Colonel CHANTLAND. They have been carefully checked by both you and Mr. Crabtree?

Mr. LUNDVALL. They have.

Colonel CHANTLAND. And submitted to the companies for checking?

Mr. LUNDVALL. Yes.

Colonel CHANTLAND. I want the record to show that we have had no word back from the Freeport Co. of having completed their checking. We have had word from the Texas.

With that record subject to the right of both companies to further check for errors of fact, we desire to offer them.

Acting Chairman LUBIN. They may be accepted.

(The reports referred to were marked "Exhibits Nos. 388 and 389," respectively, and are included in the appendix on pp. 2242 and 2248, respectively.)

Colonel CHANTLAND. That is all. I thank you. Dr. Montgomery, will you continue?

TESTIMONY OF DR. R. H. MONTGOMERY, PROFESSOR OF ECONOMICS, UNIVERSITY OF TEXAS, AUSTIN, TEXAS—Resumed

Mr. BALLINGER. May I ask the witness a question? In 1921 there was an excess production of sulfur, wasn't there?

Dr. MONTGOMERY. There was an excess capacity and I should say an excess amount above ground.

Mr. BALLINGER. As an economist you would rather expect that to break prices, wouldn't you, with competition working?

Dr. MONTGOMERY. If competition were working I should certainly expect it to break prices.

Mr. BALLINGER. In 1925 there was also a little business recession. Was there an excess production of sulfur in 1925?

Dr. MONTGOMERY. There was at least an excess capacity to produce and an excess of quantity above ground.

Mr. BALLINGER. Therefore the reaction on prices of the excess supply was probably natural if there was competition.

Dr. MONTGOMERY. At least there was a drop in prices which is what I should expect to occur under competition.

Mr. BALLINGER. Now from 1925 to 1938 wasn't there considerable excess production in the sulphur industry?

Dr. MONTGOMERY. At least there has been a much larger production per year than the companies were able to sell.

Mr. BALLINGER. In other words, it was accumulated excess production during this period.

Dr. MONTGOMERY. Yes.

Mr. BALLINGER. But it had no effect whatsoever upon price?

Dr. MONTGOMERY. So far as I can tell, none whatsoever.

Colonel CHANTLAND. Until last October.

Dr. MONTGOMERY. Until last October.

Mr. BALLINGER. In other words, as an economist, if you have an excess supply of a product there and it doesn't seem to have any effect upon price, would you say as an economist there was something wrong with competition at that point?

Dr. MONTGOMERY. I should. I should say in my opinion a monopoly exists. That is the only way by which I know prices can be held stationary under those circumstances.

Acting Chairman LUBIN. Do you have any data showing what the inventories above ground have been in various years?

Colonel CHANTLAND. We have those at the beginning and end of each year; data will be offered.

Now, Doctor, we want to get over to the other end. Will you go ahead with your discussion from that point?

PROFITS OF SULFUR COMPANIES

Dr. MONTGOMERY. Not only has the price of sulfur been held rigid for the past 12 years, the profits of the companies have been quite remarkable. The exhibit just introduced as testimony from the Texas Gulf Sulfur Co. shows the financial results of the operations of that company during the past 20 years.

Dr. MONTGOMERY. Table 2 of the exhibit from the Texas Gulf Sulphur Co. (referring to "Exhibit No. 388") indicates sales during the past 20 years of \$297,051,729 and a total cost and expense of producing and selling sulfur of \$131,445,993—a net profit on sales of \$165,605,736. Now, it must be remembered that as of December 31, 1938, the company also had in stock 3,289,728 tons of sulfur above ground, the cost of production of which is included in these total costs of production. If we could assume that the company might stop producing as of December 31, 1938, and sell its stock on hand at the average price of the last 20 years, which was \$18.18 per ton, and a sales, general, and administrative expense, which I think would reasonably cover all possible costs of selling its inventory out, of \$1.48 per ton, there would be indicated an additional profit to the company of \$54,938,458, or a total net profit from sales of \$220,554,194.

Acting Chairman LUBIN. I am interested in how you came to that conclusion. As I look at table 2 I find under "Net Sales," total sales \$16,000,000, selling and general administrative expenses of \$1,782,000, which is roughly about 11 percent. Is that right?

Dr. MONTGOMERY. I have not worked out the percentage for any individual year. I have taken the average for the past 20 years.

It will be noted also that this would change table 3, the 20-year average of column 1, which shows total costs and expenses of producing and selling sulfur as a proportionate part of a \$1 sale, of \$44.25. Under the assumptions just made, that figure would be \$38.20.

In column 2—

Acting Chairman LUBIN. May I interrupt at that point? I am interested in the methodology. I wonder whether it is really fair in estimating the cost of sales in 1938 to average the cost of sales in 20 years. Shouldn't you really take the cost of sales in '38 as the basis of assuming what the cost for selling was?

Dr. MONTGOMERY. I do not know which would be the better technical device. In either case the figures I am giving now would not be materially affected.

The net profits on sales under these assumptions just made would be 61.80 percent of the sales price of sulfur. That would mean that the 20-year average of column 2 to column 1 (column 2 is profits, column 1 is total costs of producing and selling sulfur) which is on our table 125.9 percent, would be approximately 167 percent. In other words, for every \$100 spent by the company during the past 20 years it would have received in return the \$100 plus \$167 net profit from sales.

Colonel CHANTLAND. Dr. Montgomery, at one point I think you said 62 percent and I think you meant 62 cents.

Dr. MONTGOMERY. Yes; it might be expressed in either way. I was deliberately expressing it as percent at that point.

In reference to the Freeport Sulphur Co. exhibit again, table 2,¹ the company has produced during the past 20 years 10,456,345 tons, and has sold 9,641,002 tons, at an average price of \$18.10 per ton, and an average selling and general administrative expense of \$1.57 per ton. The company has shown a net profit on sales of \$4.07 per ton, and now has an inventory of sulfur above ground as of December 31, 1938, of 960,785.84 tons. If this company should stop production as of January 1, 1939, and should sell out its stock of sulfur above ground at its average price of the past 20 years and at the average general selling and administrative expenses of \$1.57 per ton, the net profits on sales would be increased by \$15,881,790. This would indicate a net profit on sales of \$5.27 per ton, but it must be remembered that Freeport Sulphur Co. has paid in royalties to the oil companies owning the leases on the mounds from which it is producing—namely, Hoskins Mound, its major producing dome, and one other small one in Louisiana—a total of \$33,191,228.88.² Under the Hoskins agreement the sulfur company leases the mound from Texas Oil Corporation, and between 1922 and 1928 paid to the oil company 50 percent of its profits on production as royalty, during that time the company recouping its costs of exploration, of building its plant and getting into operation, and 6 percent on those costs. From 1928 to the present time it has paid over to the oil company 70 percent of its profits from the production of sulfur.

I understand that it was impossible for our accountants to get adequate data on the earlier period to make fair comparisons with the later period. So, the earlier data was not included. This earlier period included, I believe, some of the most profitable years in the company's history. Moody's Manual reports dividend payments of the Freeport Texas Co. for those years as follows: 1914, \$1,400,000; 1915, \$1,400,000; 1916, \$1,400,000; 1917, \$2,250,000; 1918, \$1,500,000; and in 1919, \$2,000,000. I believe the stock had a ledger value throughout the period of \$3,500,000. These dividends represent an average of over 47 percent per year on the ledger value of the stock.

Mr. DAVIS. Dr. Montgomery, have you any explanation as to the ownership of these other salt domes which are supposed to probably cover sulfur deposits?

¹ "Exhibit No. 389," appendix, p. 2248.

Dr. MONTGOMERY. In the exhibits which have already been submitted there is a complete list of the sulfur, or presumably sulfur-bearing domes, that are held at present by each of the companies.

Mr. DAVIS. Could you give us some indication of the percentage of the whole number now known which are owned by the present producing sulfur companies?

Dr. MONTGOMERY. I couldn't give offhand the exact number, but I believe it is somewhere between 35 and 45.

Mr. DAVIS. Out of the 60.

Dr. MONTGOMERY. Not out of the 60, Mr. Commissioner, because most of those out of the 60, or a great many of them, have already been abandoned as either not having sulfur or not sulfur in commercial deposits.

Mr. DAVIS. In other words, a portion of the 60 domes have already been surveyed or mined sufficiently to ascertain that they have no sulfur in commercial quantities.

Dr. MONTGOMERY. Many of them have. I can give you the exact figures on that if you are interested in having them.

Colonel CHANTLAND. Coming to what the witness is now speaking about, I want to offer a bound volume furnished by the Texas Gulf Sulphur Co. in response to our request for certain data, and ask that it be received but this need not be printed, it is too voluminous, but it should be a part of the record.

Dr. MONTGOMERY. I refer to the tab in the volume marked "Properties Dropped, No Production."

(The volume referred to was marked "Exhibit No. 390" and is on file with the committee.)

Dr. MONTGOMERY. That indicates that Texas Gulf Sulphur has drilled and abandoned 26 properties.

Mr. BLAISDELL. Dr. Montgomery, you referred a moment ago to certain royalties paid. I think it was by Freeport.

Dr. MONTGOMERY. By Freeport Sulphur Co.

Mr. BLAISDELL. I don't have the exhibit in front of me, so to clarify the record I would like to ask, are the royalties which have been paid included in the column "Dividends paid" by the company?

Dr. MONTGOMERY. They are not. They are included in the column marked "Cost of goods sold." To the sulfur company they are referred to as costs of operation.

(Senator O'Mahoney resumed the chair.)

Dr. MONTGOMERY. Quite obviously if those royalties paid which may or may not represent true profit to the oil companies receiving them but which certainly represented profits on the books of the sulfur companies were included in the column on "Net profit on sales," the 20-year total net profit on sales would be \$72,386,056.88 instead of the \$39,194,828, indicated in the table.

Colonel CHANTLAND. As one-half of the net profits paid to the oil companies.

Dr. MONTGOMERY. From '22 to '28, since which time 70 percent of the sulfur company's profits have been paid to the oil company owning the lease on Hoskins Mound. Of course, again that would materially change table 3¹ also, in which we have indicated the

¹ "Exhibit No. 388," appendix, p. 2242.

amount of a dollar sale of sulfur which represents total costs of producing and selling the sulphur, including such royalty, and in column 2 the amount of \$1 sale of sulfur represented by net profits to the company, likewise including such royalty as costs.

The CHAIRMAN. Have you testified as to how this sulfur is used, Dr. Montgomery?

Dr. MONTGOMERY. I have. I entered an exhibit showing the entire, at least the major uses.

The CHAIRMAN. Is it used in its raw state? It has to be transposed into acid first.

Dr. MONTGOMERY. I believe it is never used in its raw state. About 85 percent of it is used as sulfuric acid.¹ The other in various minor uses such as for medicinal purposes, but so far as the sulfur companies are concerned the sulfur is sold as it comes out of the ground; no processing whatever is involved to the sulfur company.

The CHAIRMAN. But so far as its commercial use is concerned, the sulfur content of commodities which are put upon the general market is comparatively small, is it not?

Dr. MONTGOMERY. It depends on the commodity.

The CHAIRMAN. We will take fertilizer, for example.

Dr. MONTGOMERY. In the case of superphosphate fertilizer almost 50 percent of it is sulfuric acid. To 1,000 pounds of phosphate rock is added 900 pounds of sulfuric acid, and then a few minor factors, water, for instance, about 30 pounds, to make a ton of fertilizer. Now in some other cases, for instance in the production of steel and in the production of gasoline and in the production of cellulose film, much smaller amounts of sulfur are used.

The CHAIRMAN. Have you any idea as to what generalization could be made with respect to the over-all uses of sulphur?

Dr. MONTGOMERY. Well, Senator, I do not believe any such average could be made at all, because certainly it would run from almost 50 percent in the case of superphosphate fertilizer to almost zero in other cases.

Colonel CHANTLAND. While in fertilizer the sulfuric acid is 50 percent, or 1,000 pounds of phosphate rock to 900 pounds of sulfuric acid, how as to the matter of costs of the two, the rock and the sulfuric acid?

Dr. MONTGOMERY. Of course, phosphate rock is very, very cheap, if stated in terms of tonnage, as contrasted with sulfuric acid.

Colonel CHANTLAND. So that in the superphosphate fertilizer the sulfuric acid is a big element of cost?

Dr. MONTGOMERY. It is so far as the materials going into the fertilizer are concerned; it is by far the most important. For instance, the phosphate rock sold on an average last year at \$3.28 per ton.

The CHAIRMAN. May I suggest that inasmuch as we were hoping to proceed this afternoon with the liquor industry, it might be advisable for the members of the committee to cease asking the witness questions and allow you to proceed with this matter and close it up, if you can, this morning, Mr. Ballinger.

Mr. BALLINGER. I have a few questions to ask.

¹ "Exhibit No. 371," appendix, p. 2200.

Colonel CHANTLAND. One other point that was brought out by Senator O'Mahoney, which you answered partially. The sulfur is sold as brought out.

Dr. MONTGOMERY. Yes.

Colonel CHANTLAND. By the sulfur companies.

Dr. MONTGOMERY. Yes.

Colonel CHANTLAND. Does it deteriorate or is it inert?

Dr. MONTGOMERY. So far as I can tell, it doesn't deteriorate at all.

Mr. BALLINGER. Dr. Montgomery, 1931 and 1932 were pretty bad years for business, weren't they?

Dr. MONTGOMERY. Yes; generally.

Mr. BALLINGER. A company in those very bad years, say it made 9 percent return on invested capital, was doing pretty well, wasn't it?

Dr. MONTGOMERY. I think almost any businessman in the United States would agree to that statement.

Mr. BALLINGER. What do you think of a company, the Freeport Co., that in 1931 can make 34 percent return on its invested capital after paying 50 percent or 70 percent profits as royalty? Doesn't that indicate to you the absence of competition?

The CHAIRMAN. May I suggest that we are now calling on the witness for a conclusion which the members of the committee will endeavor to make in due time. Let's confine ourselves to facts, Mr. Ballinger. I think we will proceed more rapidly.

Mr. BALLINGER. Do you think an earning of 34 percent in 1931 and an earning of 21 percent in 1932 is any indication of the absence of competition? Can you answer that?

Dr. MONTGOMERY. As an economist, I should like to make it clear also that in a thing of this sort I am not expressing an opinion of the Federal Trade Commission. In my private capacity as an economist, I should say certainly it indicates a monopoly to me. In the 20 years I have spent in studying monopolies, I would say that the economic data submitted about the sulfur industry are conclusive as to the existence of a monopoly—in fact, the tightest monopoly that has come under my observation.

Mr. BALLINGER. Do you know of any industry which you believe to be competitive that had earnings anything like this?

Dr. MONTGOMERY. I do not, and I should like to emphasize once more that, during those years, 70 percent of the profits from the Hoskins Mound were going to the oil company as royalty.

Colonel CHANTLAND. Out of these same operations?

Dr. MONTGOMERY. Out of this same production of sulfur.

Mr. BALLINGER. Take an industry like the automobile industry, which we know to be thoroughly competitive, do you know what its rate of return on invested capital was?

Dr. MONTGOMERY. I do not.

Mr. BALLINGER. Colonel England tells me they all lost money in 1931 and 1932. That is a highly competitive industry.

Dr. MONTGOMERY. I think the fact that it lost money is generally known. I do not know whether it is competitive.

Mr. BALLINGER. Is it agreed among economists, Dr. Montgomery, that a high degree of price rigidity in the face of bad business conditions is symptomatic of controlled prices?

Dr. MONTGOMERY. I could not answer for the economists. For myself, I should say it indicates that.

Mr. BALLINGER. Was the price rigidity of sulfur perhaps the greatest of any industry in the United States, in your opinion, during the depression?

Dr. MONTGOMERY. Within my knowledge, it was the most rigid of any industry.

The CHAIRMAN. Is that all, Mr. Ballinger?

Mr. BALLINGER. Except that I just wish to reemphasize that I asked Dr. Montgomery that where excess plant capacity exists in an industry, where an excess supply of a product exists and such excess supply and plant capacity has no effect upon prices, if he didn't regard that as indicative of controlled prices, and I think he answered yes. I just wanted to bring that in again because these are indicia of monopoly in the opinion of the Federal Trade Commission.

The CHAIRMAN. The committee will receive that as the expression of the witness and the representatives of the Commission.

Have you brought the matter to a conclusion, just as the buzzer calls the Senate to respond? Do you want to present something?

Colonel CHANTLAND. Yes; there has already been offered during your absence, Senator, data furnished by the Texas Gulf in response to our request.

I now want to offer data furnished by the Freeport Co. as an exhibit, data furnished by the Duval Texas Sulphur Co., as an exhibit, and the Jefferson Lake Oil Co., and ask that they be received, but they need not be printed unless the committee desires.

The CHAIRMAN. These will be received on the same terms as the others, for the files of the committee.

(Reports on the Freeport Co., the Duval Texas Sulphur Co. and the Jefferson Lake Oil Co. were marked "Exhibits Nos. 391, 392, and 393," respectively, and are on file with the committee.)

Dr. LUBIN. Do you have any figures with you showing the number of people employed in the actual mining of sulfur?

Dr. MONTGOMERY. Those figures are contained in these data just submitted for each of the companies that are now producing sulfur.

I should like to mention one or two other points which were not covered in the more general discussion. One of them is that the agreements between the Sulphur Export Corporation and Orkla, the Norwegian producer of raw sulfur from pyrites, specified that Orkla will not extend its producing plant during the years of these agreements, and that it will not lease to anyone else the right to use the patented processes.

I should like to point out also that the two small companies, Duval and Jefferson Lake, that are now producing, other than the two majors, one of which last year produced 64 percent of the total American output—these two small companies are producing today in three plants. In each case one of the two major companies holds leases, or fee ownership, to all those sulfur deposits. In one case the production by Duval Texas Sulphur Co. at Boling is from the same large deposit that is being operated by Texas Gulf Sulphur Co. The deposit is separated into two parts, so I am told, by a gypsum wall which permits the exploitation of a small part of the deposit separately from the major deposit.

The Texas Gulf Sulphur Co., according to their report to us, believes that they have about 45,000,000 tons still under ground at Boling. The Texas Duval Sulphur Co. has a very small deposit there. That deposit is being worked by Duval Sulphur Co., and a certain part of the sulfur produced is surrendered to Texas Gulf Sulphur Co. as payment by Duval for the exploitation of this deposit which is owned either in fee or under lease by Texas Gulf Sulphur Co.

The payment has, during the past several years, amounted to approximately 30 percent of the sulfur sold from that deposit. In other words, the two major companies have some sort of relationship with the two minor companies on all of their producing plants.

Colonel CHANTLAND. Will the chairman bear with me while I bring out one other point that I think will be informative to the committee? That is this: Pyrite sulfur is spoken of sometimes as competitive. Will you express a judgment as to when, at what price level, it becomes competitive, and as to the matter of countries producing enough pyrites?

Dr. MONTGOMERY. Sulfuric acid is produced from three, basically three, sources: The brimstone or raw sulfur, which accounts for approximately 70 percent of the total; pyrites, iron pyrites usually, from which 15 to 20 percent of the total—I mean within the United States—is produced; and 10 to 15 percent produced from mining operations in zinc and copper. The price rigidity in pyrites parallels exactly the price rigidity in sulfur. In other words, during those 12 years in which there is no variation in price of sulfur there is no variation in the price of pyrites. Pyrites have to be approximately 12 cents per unit, a unit I believe is 22.4 pounds of 48 to 52 percent sulfur pyrites, to compete with sulfur at \$18 per ton in the manufacture of sulfuric acid. A price of \$18 per ton for sulfur f. o. b. the mines is equivalent in competitive terms to a price of approximately 12 cents per unit for pyrites. This relationship in prices has been maintained for many years. Just how low the price of sulfur would have to be to induce the acid producers to change over from pyrites to sulfur I do not know. I should think it would be more accurate to say that the price of pyrites is determined by the price of sulfur. The United States has by no means an adequate supply of pyrites for war purposes. We only produced about 20 percent of our sulfuric acid from pyrites last year (1938). And about half of this was from imported pyrites. A major war would probably require over 3,000,000 tons of acid per year—that alone would be at least five times the amount we produced from domestic pyrites last year. Our nonmilitary requirements, of course, are much larger.

COST OF PRODUCING SULFUR

Mr. MONTGOMERY. I was asked earlier about the cost of producing sulfur in the United States under the Frasch process. In table 6 of our first exhibit on sulfur I have shown the data we have. In 1917, the Federal Trade Commission made two studies on cost of production. According to their study it was then costing Freeport Sulphur Co., \$6.15 per ton; and Union Sulphur Co., \$5.71 per ton. In 1927 and 1928, Freeport Sulphur Co. reported to Moody's Manual that their costs of production were \$6.07 and \$5.71 per ton. In their

annual balance sheets, as reported in Moody's Manual, both Freeport and Texas Gulf from 1929 to 1938 have carried their inventory of sulfur above ground "at cost." I have divided this figure by the companies' reports of their sulfur inventory as of December 31 for each of the 10 years. According to this computation Freeport Sulphur Co.'s costs have varied from \$5.64 to \$6.79; a 10-year average of \$6.13 per ton. Texas Gulf Sulphur's costs have varied by this computation from \$5.18 per ton in 1937 to \$6.22 per ton in 1933; for a 10-year average of \$5.64 per ton. In my opinion these represent the best figures we have available on cost of production. If the above figures are accurate, their profits apparently vary from \$11 to \$12 per ton.

May I add a few words, as to exploration and reserves: The original exploration work is usually done by the oil companies in their search for oil. I don't know whether every one of the sulfur domes has been discovered in this way, but I believe every one of the present producing deposits has been so discovered. The sulfur companies, I believe, have to do exploration work in most cases to determine whether the sulfur deposits exist in commercial quantities and under conditions that permit production under the Frasch technique. I note the Texas Gulf Sulphur Co. reports that they have explored and abandoned during the past 20 years about 26 prospective deposits. Their exploration work on these deposits cost them \$1,455,843.84. In addition, the company reports other costs which I assume are for leases or purchases, of \$1,101,066.83. Of course, this is very minor when compared to the amount of sulfur sold from the three deposits which they have exploited. In addition to the 26 prospective deposits which they have abandoned and the 3 from which they have produced sulfur, the company now retains leases or some other form of rights to 18 other prospective domes. On these 18 the company has expended \$779,023.01 in exploration work. In addition the company shows other costs in connection with these deposits of \$1,503,438.78. I have no way of judging the amount of sulfur, if any, contained in these deposits. For the three deposits actually exploited by the company, their reports show an exploration cost of \$1,669,731.70 and other costs, which, in this case, I assume to include the costs of producing plants, of \$9,104,796.26. The company reports that it estimates the recoverable sulfur from the Long Point dome to be about 1,500,000 tons. They estimate the recoverable sulfur still underground at the Boling dome at 45,000,000 tons. If this estimate is fairly accurate, that dome alone contains as available proven reserve almost as much sulfur as all that has been produced heretofore by the Frasch process.

As to labor costs involved in producing sulfur under the Frasch process, my computations make it about \$1 per ton because it involves an almost infinitesimal amount of labor. I have tried to make comparisons with a few of the other extractive industries. Apparently it is lower in the case of sulfur than for any comparable industry (if there is any comparable industry). The labor cost in producing anthracite last year was approximately \$2 per ton although anthracite sold at the mines for a little over \$4 per ton as against \$18 per ton for sulfur.

SULFUR IN FERTILIZERS

Dr. MONTGOMERY. As to sulfur in fertilizers: The fertilizer bill of the farmers in the United States in 1937 was \$215,000,000, which represented about 2 percent of the farm income for the Nation as a whole. But in this connection it must be remembered that over one-half of this fertilizer was used in six Southeastern States, and these happened to be the States with the lowest per capita farm incomes, so that their fertilizer bills would be far above 2 percent of their gross income. Obviously, a drastic reduction in the price of sulfur of, say, \$10 per ton, would materially affect fertilizer costs to the farmer.

The CHAIRMAN (interposing). Would it be proper to summarize your testimony by saying that the deposits of sulfur in the United States are limited to specific areas, practically two States; that they are in private ownership; that they are developed by a few companies, four of which are the leading companies; and that throughout this time to which you refer there has been a rather marked rigidity in price?

Dr. MONTGOMERY. If it be understood that the sulfur means the brimstone which can be produced under the Frasch process. There may be other deposits, of course.

The CHAIRMAN. That is a summarization of your testimony?

Colonel CHANTLAND. Plus the proposition that as workable sulfur is produced, for some reason or other these companies either lease or buy those workable deposits up to date.

Dr. MONTGOMERY. They have done so up to date.

The CHAIRMAN. And that under the Webb-Pomerene Act these companies are permitted to enter into combinations with respect to world trade, and they have filed their contracts to that effect with the Federal Trade Commission.

Dr. MONTGOMERY. That is right. In my opinion the sulfur companies have been able to use the Export Corporation as a device for maintaining prices within the United States. I should like to point out that this is a matter of opinion, although it is an opinion held by all of the authorities on the subject that I have read. In one of the exhibits just introduced, the president of the Export Corporation says, "We have no suggestion for amending the existing act because our experience has been that the provisions of the act as written fully meet our necessities."

Mr. O'CONNELL. I am not entirely clear as to the provisions of the Webb-Pomerene Act, but I was under the impression that the Webb-Pomerene Act did not authorize combinations or agreements as to world trade, but rather as to export trade by domestic companies. Isn't that the fact?

The CHAIRMAN. If I used the phrase "world trade," that is what I mean. It is, of course, the Export Act.

That finishes the testimony. The committee will stand in recess until 2:30 this afternoon, when the presentation of the Federal Trade Commission of liquor witnesses will begin.

(Whereupon, at 12:10 p. m., a recess was taken until 2:30 p. m. of the same day.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

MONDAY, MAY 8, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE.
Washington, D. C.

The committee met at 10:30 a. m., pursuant to adjournment on Wednesday, May 3, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senators O'Mahoney (chairman) and King; Representatives Williams and Reece; Messrs. Arnold, Patterson, Lubin, O'Connell, Henderson, Willis J. Ballinger, representing Federal Trade Commission; Edward Eicher, representing Securities and Exchange Commission; and W. A. Janssen, representing Department of Commerce.

Present also: Representatives James M. Barnes, Illinois, and Sam Hobbs, Alabama, members of House of Representatives Judiciary Committee; Hugh Cox, Ernest Meyers, and James C. Wilson, attorneys; and Joseph Borkin, economic expert, Department of Justice.

The CHAIRMAN. The committee will please come to order. We have assembled this morning for a brief hearing under the direction of the Department of Justice on beryllium. Mr. Cox is to be in charge of the examination. Mr. Cox, you have an opening statement to make?

IMPORTANCE OF BERYLLIUM

Mr. Cox. I have a brief statement, which I think it might be useful to make. Beryllium is an element which can be combined with copper or nickel or certain other metals to produce alloys possessing to an extraordinary degree the qualities of hardness, lightness, and strength. The commercial history of this material is too brief for anyone to predict with certainty the exact ranges of use that may be possible for it or the amount of the material which the commercial and industrial world can ultimately absorb.

On the other hand, there are reasons to believe that the material has a substantial potential importance. Hitherto most of the evidence which has been presented to the committee has had to do with economic problems which arise in existing industries. This brief hearing may be of particular interest to the committee because it deals with problems which arise in connection with attempts to develop a new industry. Some of the material which will be presented will show that because of the size of the international business units which now operate and because of the size and practices of the units which operate within national boundaries the problems which face a man

who attempts to develop a new business are radically different now from what they were 50 years ago.

Some of the evidence will relate to patent practices. The evidence as to these practices will emphasize the use of patents which can be made in this country by foreign interests. This is an aspect of the patent problem which has not hitherto been emphasized in the material which has been presented to the committee by the Department of Justice and the Department of Commerce. Another part of the evidence which has nothing to do with patent problems, which will illustrate the difficulties which arise in connection with the exploitation of a new material by reason of the existing structure of the industry and the habits and practices which prevail therein.

The material will emphasize the effect which competitive conditions in an established industry may have upon the price policy adopted in the organization and development of a new and related industry.

Our first witness this morning is to be Mr. Andrew Gahagan.

The CHAIRMAN. Mr. Gahagan, do you solemnly swear that the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. GAHAGAN. I do.

TESTIMONY OF ANDREW J. GAHAGAN, PRESIDENT OF THE BERYLLIUM CORPORATION, AND THE BERYLLIUM CORPORATION OF PENNSYLVANIA, A SUBSIDIARY COMPANY, READING, PA.

Mr. Cox. Mr. Gahagan, will you give the reporter your name and address?

Mr. GAHAGAN. My full name is Andrew J. Gahagan; my address is Reading, Pa. I am president of the Beryllium Corporation and the Beryllium Corporation of Pennsylvania, a subsidiary company.

Mr. Cox. What is the business of the Beryllium Corporation?

Mr. GAHAGAN. The business of the Beryllium Corporation is extracting beryllium metal from the ore, making up certain master alloys and now certain final products, and selling those to other fabricators and the general public.

HISTORY AND DESCRIPTION OF BERYLLIUM

Mr. Cox. Will you tell the committee briefly what beryllium is and where it is found, and what its peculiar characteristics are, Mr. Gahagan?

Mr. GAHAGAN. Well, everything in the world or the universe is made up of some combination of just 92 different things called elements. One of these—some of these elements, for example, are copper, nickel, silver, hydrogen, oxygen, and so forth. Beryllium is one of these elements. In other words, it is a base metal. If you arrange the 92 elements according to their weight, you would find hydrogen the lightest element; helium the next; lithium next, and beryllium fourth. In other words, there are only three elements in the world lighter than beryllium—two of them are gases. Beryllium, although it has only been recently heard of, is not a new metal. It was identified in 1797 by a Frenchman named Vaquelin.

The story goes that Vaquelin happened to notice that emerald, aquamarine and beryl all had the same weight, and he would analyze the stones for alumina and for silica, and he would end up with the residue in each case which he could not further decompose. This apparently was a compound called beryllium sulphate, which has a rather sweetish taste, so he knew that it was some metal and he called it glucinium. Along about 1824 a German by the name of Wohler started working on beryllium and he changed the name from glucinium to beryllium. This name came from the mineral beryl, which back in Nero's time got its name because the Emperor Nero apparently had a monocle made of beryl crystal, highly polished, and that mineral from then on was known as beryl. So the Germans called the metal beryllium from the mineral beryl in which the metal came.

Mr. Cox. Where is the metal found, the ore?

OCCURRENCE IN ABUNDANCE OF THE ORE

Mr. GAHAGAN. The ore is found almost all over the world. As far as we know, there is more beryllium in the world than there is lead. It is not a rare metal, as maybe molybdenum or some of the other metals.

The CHAIRMAN. In what forms is it usually found?

Mr. GAHAGAN. It is found in various minerals. It occurs as far as we know to date in about 34 different minerals, beryllium-bearing minerals. When I first got in this business some 10 or 12 years ago, I immediately contacted the Bureau of Mines and found that they had a little information on it, but not too much, because their funds, of course, do not permit their exploring every metal and its location throughout the world. So I sent engineers all over the United States and Canada, and with Columbia School of Mines, Colorado School of Mines, and the Bureau of Mines, we started in a systematic research of and analyzing various ores to see if we could get a list of the ores in which beryllium occurred, or if there were any new ones, and we ended up with a list of some 34 different beryllium-bearing metals, the beryl-oxide content of which varies from a trace up to 50 percent.

The CHAIRMAN. In what States of the Union is it found?

Mr. GAHAGAN. It occurs along the eastern seaboard from Maine to Georgia. It jumps the Mississippi Valley then and is found in the Black Hills, North and South Dakota, Colorado, Utah, Wyoming, Nevada, California, New Mexico, and Arizona.

The CHAIRMAN. Where in Wyoming, do you know?

Mr. GAHAGAN. I don't know offhand. We have a cabinet full of records. The occurrences in this country or in the world, so far as we know, are not very large deposits of beryllium, although we are on the track of a few that look like large deposits in this country, and I hope to send some engineers out West this summer to do some more exploration work.

Beryl occurs in what are called pegmatite dikes, which means a crack in the earth's surface that occurred years ago, and molten rock flowed up through those cracks throughout millions of years, perhaps, with tremendous heat and very slow cooling, tremendous pres-

sure. They crystallized out. So you find beryllium generally in those areas, or beryllium-bearing minerals, I should say, associated with feldspar and mica. I prepared a map at the request of the committee and brought it down here, of the world, showing where we have spotted the known locations and areas.¹ In there every tack represents either some location from which we have purchased ore or where we have considerable data.

PROCESS USED IN CONVERTING ORE INTO WORKABLE METAL

Mr. Cox. Will you tell the committee briefly what the process is for converting this ore into an alloy?

Mr. GAHAGAN. The process is very simple, although it took the world many, many years to work it out, as in most of those things. As a matter of fact, I have a card index at the plant, which is about 3 feet long, of people who worked at some time in their life on beryllium. Some of the world's greatest scientists since 1797 have attempted to get beryllium out of the rock, or out of ore.

Mr. Cox. Do you have a piece of the ore there that you can show the committee?

Mr. GAHAGAN. Yes. In essence the mineral is in general as follows: A rock containing beryllium, of course, contains a lot of other metals. There are very few metals found pure in nature. Gold is one of the few. So the first thing to do is to get rid of all of the other oxides. This rock is a specimen of beryl.

The CHAIRMAN. I notice that is hexagonal. Is the ore always in that shape?

Mr. GAHAGAN. If you look at it under a microscope you will find the ore is always hexagonal. It is very odd. As a matter of fact, this is pure beryllium metal. If you looked at those flakes under a microscope you would find they are hexagonal also. A pure stone of beryl without an impurity would contain about 14 percent beryllium oxide. If it had no impurity and had crystallized without cracking, it would be rather white and transparent. If it had a little chromium impurity in it, it would be green and would be called emerald; a little iron impurity, it would be called aquamarine. In other words, there is very little difference between this stone and an emerald, although we, of course, don't grind up emeralds to get beryllium metal out.

The ore is crushed, ground up, and then a number of different ways can be used for collecting beryllium oxide. The method that we prefer is roasting the ore with a byproduct of the fertilizer production. We buy this from the American Agricultural or the American Cyanamid. I understand a good deal of it is produced in the Tennessee Valley, called sodium silica fluoride and sodium fluoride.

We roast the ground ore with these chemicals and a very peculiar thing happens. The sodium and fluorine combine with the beryllium in the presence of heat so that later on in dissolving this in water, an operation which is called leaching, only the beryllium goes into solution, and the silica, alumina, iron, and so forth, drop out, so that we have in our leach tanks a thing that looks like clear water, to which we then add caustic soda and precipitate beryllium hydroxide.

¹ Not included in the record.

That on drying is beryllium oxide, which is a white powder and looks somewhat like talcum powder.

That process is very simple and is not very expensive, certainly, on large-scale production.

Senator KING. Beryllium is found, is it not—it is a product of igneous formation in porphyry dikes?

Mr. GAHAGAN. Pegmatite dikes.

Senator KING. But in porphyry formation.

Mr. GAHAGAN. Yes.

Senator KING. And those cracks, to use your expression, in the earth's surface, by reason of heat and expansion, force the hot metal or hot molten matter up usually in the form of a liquid solution, and then it is disseminated on either side of the dike, as I call it, into the rock which is sufficiently porous to permit the deposition of this metal. Copper and silver ores are found frequently, are they not, in cracks with the beryllium deposits?

Mr. GAHAGAN. I believe so. I am not a geologist.

Senator KING. I know most of our metals in the West, copper and lead and zinc, and a little beryl, are found in igneous formation, forced up through the cracks by the heat below and deposited in contiguous territory where the ground is poorest.

Mr. GAHAGAN. As a matter of fact the crystals might have been imbedded in a rock and you would find it scattered. We found areas in which you have these the size of your fingernail, just thousands of them in a rock 4 or 5 feet wide, and we have done a good deal of work on taking mixtures of those rocks, breaking them up, and by flotation, floating out the beryl, separate it from the waste rock.

Senator KING. You would need a great many tons of the porphyritic and other deposits in order to get a few pounds of beryllium or beryllium oxide.

Mr. GAHAGAN. Yes; although at the present time all of the beryl is hand-cobbed, but at sometime in the future we will have to concentrate the ore.

Mr. Cox. After you get the beryllium oxide, the next step is to produce pure beryllium metal?

Mr. GAHAGAN. After we get the beryllium oxide we heat it, pass chlorine through it, and form a compound called beryllium chloride. We then dissolve that in sodium chloride, molten sodium chloride, and play out the beryllium flake, a very similar process to that used by the Aluminum Co. in the production of aluminum.

Mr. Cox. How is that flake processed into an alloy?

Mr. GAHAGAN. This flake then is melted, if you want to make an alloy from flake, a high-percentage alloy, for example. The flake is compressed and then melted down into a solid piece or alloy directly with copper. It melts with copper, nickel, or some other metal. I have a few specimens here in my pocket.

Here are specimens of the pure metal that you can keep.

Mr. Cox. That is pure beryllium?

Mr. GAHAGAN. That is about 80 percent beryllium, 20 percent aluminum.

Mr. Cox. Your company, as I understand it, is engaged in producing beryllium alloys along the lines that you have described. Is that correct?

PRODUCTION AND PHYSICAL QUALITIES OF BERYLLIUM ALLOYS

Mr. GAHAGAN. Yes, sir. About 10 years ago, when we first went into this business, I knew that it must have very interesting properties because it was really the lightest metal in the atomic table, and I knew in general that there was a great deal of it, so our line of research took a number of directions. First, I sent engineers around this country, as I said before, and through Canada, and went to the mines who had engineers in South Africa and other countries and had them look at what we had heard about as beryllium deposits. We also did a lot of research on the production of beryllium metal itself, and I employed one or two metallurgists, the chief of whom was J. Kent Smith, to study the effects of the addition of beryllium to other metals.

The first metal that we worked on was an alloy of beryllium and aluminum. We worked for some 2 years on that, without very great results, because beryllium and aluminum are not soluble in each other any more than oil and water; in order to make an alloy you must have a mutual solubility of one metal and the other, otherwise you have merely a mechanical mixture, with no bond between the individual grains.

We next—J. Kent Smith, rather, next started into a research program of finding out what beryllium would do when alloyed with some of the heavier metals. The first one we tried was a little beryllium and gold, and we found that it hardened gold so that it was almost impossible to cut it. Curiously enough, Mr. Kent Smith found that the addition of minute quantities of beryllium to copper, to nickel, and in certain cases to iron alloys, produced physical properties, tensile strength, and hardness, and so forth, that we thought impossible; as a matter of fact we didn't believe the figures at first, and after repeated tests we came to the conclusion that these figures were true.

Mr. Cox. Perhaps this would be a good point for you to explain that exhibit to the committee.¹

Mr. GAHAGAN. I will. I found a small amount of beryllium, for example, say 2 percent, when added to copper made it possible to harden copper by heat treatment, similar to the way that you harden steel.

I had a very interesting experience in that connection. The first company that we told this to, a copper company, the Bridgeport Brass Co., said, "Now, Mr. Gahagan, you have these test specimens here that you say pull 185,000 pounds and of a Brinell hardness of 350 and so forth. We have never heard of any such alloy; there isn't any such thing as an alloy with those properties, that is an alloy of copper, and we would like to test those while you are here." Well, I hadn't seen the tests myself and I was rather interested. Mr. Christie disappeared from the room for about a half hour and came back and said that the master mechanic down in the tool room was quite busy, so he told him that he had some crazy people up in his office who said they had tempered copper and the only way that he could get rid of them was for him to hurry up and drop all the rest of his work and machine up these test specimens and he would show us up and then kick us out of his office.

¹ Mr. Gahagan displayed an ingenious device illustrating to the committee the relative tensile strengths of various metals and beryllium alloys. The graphic illustration is found in "Exhibit No. 476," included in the appendix on p. 2276.

Mr. ARNOLD. What year was that?

Mr. GAHAGAN. This was about 1930. And he said this rather laughingly and jokingly, but at the same time seriously, "You know, the old ancients some 2,000 years ago were supposed to have had a method of hardening copper by heat treatment, and about every 6 months some crazy nut comes into the office here and says that he has a method for hardening copper by heat treatment, the old lost art of the Egyptians." Said he thought we were in the same category. Well, I wasn't quite sure we weren't, as a matter of fact at the time. We went upstairs and put the beryllium copper in a tensile test machine and I was just as surprised as they were when it pulled 185,000 pounds. As the pointer kept getting higher and higher they were very much amazed because that is a strength that has been unheard of in copper before. It had a Brinell hardness of this particular piece of about 401.

Now, those figures, to make them mean something to you, can be shown you here. The committee instructed me to bring certain specimens down here. This is a piece, to illustrate hardness, of 2 percent and 98 parts copper when heat treated; this is a cast of beryllium-copper, which has been shoved down into this piece of die steel, bake-lite die steel cold, under a pressure of 400 tons, and that is what it did to the steel.

The CHAIRMAN. The steel was cold?

Mr. GAHAGAN. Yes, sir.

The CHAIRMAN. And the beryllium was cold?

Mr. GAHAGAN. Yes.

The CHAIRMAN. And how deep was the impression made in this block?

Mr. GAHAGAN. I would guess that about a half inch, sir.

The CHAIRMAN. I ask that merely that it will show up in the record.

Representative REECE. And this is the same piece of beryllium copper alloy which was used in making the depression in the die steel?

Mr. GAHAGAN. Yes, sir.

Representative REECE. And for the record, the beryllium alloy is not scarred or depressed by the pressure?

Mr. GAHAGAN. No.

Mr. PATTERSON. What is the hardness of beryllium? That is 1 to 10, what is it in comparison to a diamond?

Mr. GAHAGAN. Oh, much softer than a diamond. Beryllium metal itself—

Mr. PATTERSON (interposing). What is the diamond, 10?

Mr. GAHAGAN. Ten and a half. Beryllium probably would be seven, seven and a half, somewhere along in there. It is quite hard. This would cut a piece of glass. This is pure beryllium.

Mr. PATTERSON. Seven and a half—that means something to me. Although I am a mining engineer by degree, I know nothing about beryllium. This is extremely interesting. While I am speaking I might ask one or two questions. Is there an abundance of this ore?

Mr. GAHAGAN. As far as we know; yes, sir.

Mr. PATTERSON. And how much approximately was imported into the United States last year?

Mr. GAHAGAN. I haven't that figure, but it is available at the Bureau of Mines. I could get it for you.

Mr. PATTERSON. Is the method of extraction of metallic beryllium difficult and expensive?

Mr. GAHAGAN. No, sir; not particularly.

Mr. PATTERSON. What is the percent of this ore imported? Do you import all of it? What are the sources? What other countries does this ore come from? Oh, you've got a map there. I see.

Mr. Cox. Where do you get your ore?

Mr. GAHAGAN. We have bought ore, in order to encourage various people throughout the country and the world in hunting for beryl ore purposely from widely scattered sources. We have got it from New York City, Mount Kisco, rather, which is just outside of New York; we have bought several car loads from Connecticut, from Maine, from Vermont, New Hampshire, from North Carolina, some from Virginia; we have purchased a lot from the Black Hills, from Colorado, and practically all the States out west that I have indicated on the map. We have purchased considerable from India and from South America, and some small lots from South Africa.

Mr. PATTERSON. What percent of metallic beryllium does the average ore that you buy contain?

Mr. GAHAGAN. The average beryl runs all the way from 6 percent beryllium oxide content to 14 if it were a gem stone. The average runs around 10 to 13 that we buy.

Mr. PATTERSON. You wouldn't buy ore 4 percent?

Mr. GAHAGAN. We wouldn't because we could get all the 10 that we want, but we could use the 4 percent ore just as well. As a matter of fact, we could use lower percentage ore if necessary.

I brought another exhibit here which I don't see, which will illustrate more graphically than I could describe to you just how hard beryllium copper is, and that is a chisel of beryllium copper and a piece of steel and a hammer. I don't believe you will want me to cut the steel with the beryllium copper chisel on this table, but it can be done if anyone wants to do it afterward.

You can actually cut a piece of steel—not every piece of steel; you couldn't cut tool steel with a beryllium copper chisel, but you could cut normal structural steel without any difficulty. As a matter of fact, we sell quite a lot of beryllium copper for nonsparking tools, as we call them, safety tools, because with the use of steel tools around oil refineries, gas plants, airplane hangars, etc., there is a liability of explosion from a spark, and if beryllium copper tools are used there can be no explosion from that tool, no spark from that tool.

As to the tensile strength, I remarked a few minutes ago about the fact that we have found that small percentages of beryllium when added to copper made it possible to heat-treat the copper and to produce tensile strengths that the world had never known. The committee suggested that I bring an exhibit down here which would illustrate the tensile strength of beryllium copper and beryllium nickel in comparison with some of the standard materials in use today. Tensile strength is usually calibrated to so many pounds per square inch, a thousand pounds per square inch, and this will graphically show you what I am talking about. For example, the first one here, the smallest one, is duralumin, which is an aluminum copper alloy, about 95 percent aluminum, 5 percent copper, which is used in air-

planes, in airplane construction. That has some 53,000 pounds tensile strength per square inch. In other words, if this wire were one square inch in cross section it would support a load of 53,000 pounds before breaking.

The next is structural steel, such as used in this building; it has a tensile strength of 60,000 pounds.

The next is yellow brass, with a tensile strength of 70,000 pounds.

The next is silicon bronze, 90,000 pounds.

Stainless steel, 90,000.

Phosphor-bronze, 100,000.

Monel metal, which is a nickel copper alloy, 125,000.

And beryllium, No. 10, 110,000.

Then we come to beryllium copper 2 percent alloy, 185,000 pounds, and 2 percent beryllium and 98 percent nickel will give you the astounding figure of 230,000 pounds; by cold working we get that even as high as 300,000 pounds, which means that a bar one square inch in cross section would support a load of about 150 tons before it would break.

Mr. Cox. Does this chart illustrate the same thing?

Mr. GAHAGAN. Yes.

Mr. Cox. For the sake of the record I would like to put that in.

(The chart referred to was marked "Exhibit No. 476" and is included in the appendix on p. 2276.)

The CHAIRMAN. It may be admitted.

Mr. Cox. That chart, which is now being admitted, illustrates the tensile strength of beryllium alloys?

Mr. GAHAGAN. Yes.

THE "MASTER ALLOY"

Mr. Cox. As compared with other alloys. Mr. Gahagan, will you show the committee what you describe as the master alloy?

Mr. GAHAGAN. What we term master alloy is an alloy of some 3½ to 5 percent beryllium, which we make up first, and then add that, or sell that to certain customers, and they use that with more copper to cut the alloy to the final desired percentage, such as 2 percent. Now the reason we do that is as follows: Beryllium itself has specific gravity of 1.8. In other words, this piece that I hold in my hand weighs less than twice the weight of water. Copper has a specific gravity of 8.89, so if you took a molten vat or a crucible full of molten copper and added beryllium, pure beryllium, to it it would float around on the top like a piece of cork.

Mr. HENDERSON. Will you say that again?

Mr. GAHAGAN. Pure beryllium has a specific gravity of 1.8. In other words, less than twice the weight of water. Copper has specific gravity of 8.89. If you took a crucible full of molten copper and put beryllium in it, all the beryllium would float—pure beryllium—on the top and beryllium melts at a temperature of 1,280° C.; copper, 1,100°; so you would have to raise the temperature of your copper bath up to say 1,300° C., at which temperature your beryllium in molten state would oxidize, and you would end up with a beautiful white powder on top of your copper bath, but very little beryllium in your copper bath.

Now a curious thing in metallurgy, if you take two metals that have different melting points, such as copper and beryllium, you would expect a mixture of the two to melt at some point in between those two melting points. For example, copper melts at 1,100° C.; beryllium at 1,280°; you would expect an alloy of the two to melt somewhere in between, but it doesn't. The alloys melt at lower temperatures than either one of these metals; that, in general, is true throughout metallurgy. The melting temperature varies according to the percentage of beryllium and so you have a curve starting at copper 100 and then going down, and then going up to 1,280, when you get 100 percent beryllium.

The lowest melting point on that curve is a term that means nothing, called eutectic, and that is an alloy of about 4½ to 5 percent beryllium. That alloy melts at 850° or 900° C., so if we make up an alloy of 4, around 4 to 5 percent beryllium, and the balance copper, it has a melting point lower than copper, so when this is put in a molten bath of copper it dissolves readily as sugar does in coffee.

Mr. Cox. That master alloy is used to produce still another alloy, is it not?

Mr. GAHAGAN. Yes; this master alloy is a convenient form for handling beryllium. In other words, for selling beryllium or for using it; we use it in our own plant. You take the master alloy and then make an ingot of say 2 percent or whatever percentage beryllium you want, and then that ingot is rolled to sheet, to rod, to wire—drawn into wire, punched into tubing, forged, or made into castings, the same as any other alloy.

Although beryllium-copper has the great advantage that after your spring, for example, is finally made up in its finished form, you then heat treat it and you increase the hardness tremendously; you increase the strength tremendously, and you improve the electrical conductivity, which is just the reverse of what happens when you harden any other copper alloy.

Mr. HENDERSON. What would the effect of that reversal be in an automobile?

Mr. GAHAGAN. In what, sir?

Mr. HENDERSON. Used in any automobile part, that reversal you were speaking about?

Mr. GAHAGAN. The fatigue?

Mr. HENDERSON. Yes.

USES OF THE ALLOYS

Mr. GAHAGAN. Well, it is going to be used in automobiles. The only way I can describe it is "fatigue." Fatigue testing machines for all intents and purposes are machines which bend a spring and then let it go, and keep doing that until it breaks, and that gives you the fatigue life of the spring. Phosphor bronze, the present bronze spring, on such a machine has gone as many as three or four hundred thousand vibrations before it will break. The best steel spring will go two or three million vibrations before it will break, but beryllium-copper and beryllium-nickel will go 15 and 20 billion, and more.

Mr. HENDERSON. Did you say billion?

Mr. GAHAGAN. Yes, sir; billion.

Mr. ARNOLD. Have you ever broken one then?

Mr. GAHAGAN. If you don't overstress it——

Mr. ARNOLD. You never have broken it by fatigue?

Mr. GAHAGAN. By ordinary service, no.

Mr. Cox. Could you tell us more about the range of uses which are possible for these alloys?

Mr. GAHAGAN. That would take a few days doing that.

Mr. Cox. Be as brief as you can.

Mr. GAHAGAN. Well, beryllium, of course, is going to make it possible to use copper and nickel in a lot of places where they are not now being used. It is going to make possible the inventions of new types of machines, motors, electrical equipment, and so forth. As a matter of fact, we could write the history of the world in terms of metallurgy. The iron deposits in England made it possible to produce iron cheaply and made the industrial revolution. The development of steel made trains possible; the development of alloy steels made automobiles possible, and so the development of beryllium alloys is going to mean new and improved types of motors, telephone instruments, airplanes, and a thousand and one changes in our life.

Mr. Cox. Just what use of it is made in aircraft?

Mr. GAHAGAN. At the present time in aircraft the principal use for it is, first of all, altimeters. Your beryllium-copper diaphragm is more sensitive than any of the materials. It is used in cowl hinges and springs; it is used to some extent in feed lines; it is used for a great number of the parts in your magneto, because there you want the springs to continue to function; you want no change in them in either the pressure they exert nor do you want them to fail. In Germany it is used in every airplane bushing with tremendous success. As a matter of fact, I don't know of any case of there ever having been one failure in Germany.

Mr. HENDERSON. Are they using any bushings in the American airplanes made of beryllium alloy?

Mr. GAHAGAN. They have used some; not now.

Mr. Cox. That is beryllium-copper?

Mr. GAHAGAN. Yes.

Mr. Cox. Has any use of beryllium-nickel been made in aircraft?

Mr. GAHAGAN. Yes, sir; beryllium-nickel is used not in this country because we haven't been able to make any beryllium-nickel in this country; only the Germans have been able to make beryllium-nickel; that is, up until recently, but I do know that they use it in airplane-motor valve springs. Beryllium-nickel is a rather interesting material in that it has its full physical properties; that it is full strength at 400° and 500° C., which is, say, eight or nine hundred, nearly, degrees F.; just as strong as it is at room temperature, so it is an ideal material for valve springs.

Mr. HENDERSON. Then the only possibility of getting higher speeds really in airplanes would be to use some alloy like that?

Mr. GAHAGAN. That is right, sir. As a matter of fact, you remember a few years ago German automobiles came over here and cleaned up in the Roosevelt race; they had beryllium-nickel valve springs. That helped them quite a bit, I think. The beryllium-nickel is of tremendous importance to aviation. As a matter of fact, both beryllium-copper and beryllium-nickel have a great military use. A

number of them we are working on with various war departments that I don't want to describe.

I do think that the future of aviation is largely dependent on beryllium-nickel. That isn't because I happen to be connected with the beryllium business, but because of certain physical constants, which nature has set up. We are designing our airplanes now, and they have some abroad, that fly at speeds we have never thought of before. As a matter of fact, I know that they are designing planes now to fly 500 and 600 miles an hour. That is not a power dive; I mean on the straightaway. Now, that speed, or those speeds, are going to mean such stresses and strains as the world has never heard of before, and the materials that are now used for airplane construction are not strong enough and will fail due to vibration, due to fatigue. And as far as I can see it, the future of airplane construction is thin-section heavy metals, particularly beryllium-nickel, which can be welded and which can be built quickly, and which will not corrode, and which will stand terrific vibration. There are a lot of factors which I won't go into at the present time. I don't think it would interest the committee, perhaps, except in a general way.

The CHAIRMAN. What is the tensile strength of beryllium nickel?

Mr. GAHAGAN. Two hundred and sixty thousand pounds. It is the next to the last sample.

The CHAIRMAN. And the last one?

Mr. GAHAGAN. Beryllium-contracid also is an alloy, which is used in Germany for watch springs, dental instruments, surgical instruments, hypodermic needles.

The CHAIRMAN. That is also beryllium-nickel?

Mr. GAHAGAN. Yes.

The Chairman. What is the tensile strength of that?

Mr. GAHAGAN. That is about 260,000, also; that has some very unusual properties in that it is more stainless and will not corrode with acid and makes it particularly suitable for surgical instruments, hypodermic needles, and so forth.

The CHAIRMAN. These alloys would be suitable to resist the vibration developed at high speeds in an airplane?

Mr. GAHAGAN. Yes, sir; as a matter of fact I had a watch which Dr. Rohn gave me when I was in Germany 4 or 5 years ago, which was built entirely of beryllium-nickel and beryllium-copper. That watch had been dropped from an airplane 3,000 feet up and all it broke was the crystal, and he had a new crystal put in and gave it to me. Unfortunately, I haven't it with me as I lost it about a month ago, but I hope to get another one and not drop that from an airplane.

PRODUCTION AND USE ABROAD

Mr. Cox. You spoke of them making beryllium in Germany; do you know whether the material is being produced in any other foreign countries?

Mr. GAHAGAN. Yes, sir; in France.

Mr. Cox. Any of it being produced in Italy?

Mr. GAHAGAN. France and Italy; on a large scale, I understand, from all the information I can gather. You have some letters which bring that out.

Mr. O'CONNELL. I understood you to say beryllium-nickel had only been used in Germany in connection with aviation?

Mr. GAHAGAN. That is right.

Mr. O'CONNELL. Why is that? Could you explain that?

Mr. GAHAGAN. Well, you see the trouble with this beryllium business, really isn't producing beryllium at all; it is in fabrication, in producing alloys of beryllium and handling those alloys. Every new thing, of course, involves new problems; it is just the same as if, say, a hundred years ago you had gone to someone with a drawing for a present-day Cadillac car; he couldn't have built it if he had had the drawings, because he would not have had the materials nor the tools of production; or if you had gone to someone 100 years ago with the formula for stainless steel, they wouldn't have been able to produce it because they wouldn't have had the proper kind of furnaces, crucibles, and technique, and so today beryllium introduces new technique in fabrication, and that is one of the things that has thrown us for a loss up to date.

Mr. O'CONNELL. That has not occurred in Germany to the same extent?

Mr. GAHAGAN. No; the Germans have been considerably further advanced than we are in this country. Beryllium for various technical reasons introduces entirely new problems in casting the billets and in rolling; it must be rolled at different speeds. The beryllium alloys must be handled differently. You would think, for example, that an alloy of 98 percent copper and 2 percent beryllium could be very beautifully handled by a copper fabricator. As a matter of fact, if we had to do this thing over again we would probably go to steel fabricators because the technique is closer to steel than it is to copper fabricating technique.

Mr. O'CONNELL. You mean there is a certain amount of resistance on the part of fabricators other people would have to change?

Mr. GAHAGAN. I am not talking about that, sir; I am talking about the inherent difficulties themselves. I can go into a great deal of detail on it if you want, but just as I said before, beryllium has introduced entirely new problems in fabrication; I mean making a billet, rolling it and turning it into tubing, wire, or something useful, and while beryllium-copper has been produced, we have produced it fairly successfully, and have taught a number of our clients to handle it fairly successfully, that is because the temperature of beryllium-copper at the melting point is relatively low, but beryllium-nickel melts at a very high temperature and the chances of oxidation double about every 100° rise in temperature, so that we have not successfully produced any beryllium-nickel in this country until recently, and we will shortly produce beryllium-nickel commercially.

For some time we have imported various parts of beryllium-nickel, wire rod, certain watch springs, and so forth, for test purposes by American companies, pending the time that we would get into fabrication ourselves. As a matter of fact, I had hoped to build up quite a business on importing beryllium-nickel into this country and building up my business before I went into fabrication, and then put in rolling mills, and so forth, ourselves, but due to the tariff, and all the international difficulties, it is almost impossible to import any material from Germany, and so we have recently set up to produce beryllium-nickel and will be turning it out—we have turned out some

already; we will be in commercial production in a few weeks, and I hope, therefore, at that time we will be able to make this material available to the American public for watch springs and dental instruments, for valve springs and for some other uses which I won't go into because they are secret with the aircraft corporation, but of tremendous importance to this country.

Mr. Cox. Mr. Gahagan, how long has the Beryllium Corporation been in the business of producing these alloys? When did you start?

Mr. GAHAGAN. I started in 1929—been at it 10 years.

Mr. Cox. At one point in connection with your development of your company; you acquired certain rights under patents which were owned by some German interests, did you not?

Mr. GAHAGAN. Yes, sir; I did.

Mr. Cox. Will you tell us the story about that?

Mr. GAHAGAN. Well, like all of these things, when you work very hard and think you are pretty smart, you find that somebody else has thought of the same thing before you did. As I described before, Mr. J. Kent Smith, who was our metallurgist—by the way, he had been chief metallurgist for the British Government during the war and was at one time chief metallurgist for the Vanadium Corporation, and afterward for the Climax Molybdenum, and a man of tremendous experience. In his early youth he worked with Madam Curie and got radium poisoning and had to quit. He went into metallurgy then. Well, as I described before, he found that an addition of very small percentages of beryllium to copper and to nickel, and so forth, made alloys that were heat treatable, and made alloys stronger than anything the world had ever heard of before, and we were certainly surprised at the results we got.

I started, of course, to apply for patents, as I thought: We have everything; we are now set for a tremendous business. And just about the time we had gotten our patent applications all set and ready for filing on this heat treatment and alloys themselves, I noticed an article in a German paper which was translated, describing fully the heat treatment of beryllium-copper and beryllium-nickel, so I knew the Germans must be considerably ahead of us. This publication was in the name of Siemens & Halske.

Mr. Cox. Tell us about Siemens & Halske. What is it?

Mr. REECE. What time is this, Mr. Cox?

Mr. Cox. Give us the date, too, exactly what year was this?

Mr. GAHAGAN. This was about 1930 or 1931; I have it somewhere in my records.

SIEMENS & HALSKE IN THE BERYLLIUM FIELD

Mr. Cox. Now what is Siemens & Halske?

Mr. GAHAGAN. Well, Siemens & Halske, as I found later when I went over there, is a tremendous company. They are interested in all sorts of businesses; their chief business is electrical equipment. They have their principal plant right outside of Berlin in a place called Siemenstadt, where they have some 150,000 employees alone in this Berlin plant. They have a research laboratory—I am sure it is considerably larger than all the Bureau of Standards, all the buildings out there. They spend large sums every year on research. They have ramifications of all kinds; they build electrical equipment;

they build or are interested in chemistry and metallurgy. To describe how important Siemens is in Germany, I would say if you took du Pont and the Ford Motor Co. and General Electric all together, why that might relatively represent the importance of Siemens. They are one of the largest companies and the most successful of companies, and the best operating companies, in the entire world.

Mr. Cox. What did you do, Mr. Gahagan, after you found out Siemens-Halske was interested in methods for producing beryllium?

Mr. GAHAGAN. When I found out they were interested in beryllium I concluded that they had done a very thorough job, which I knew they would do, and which I found out afterward to be the case, so I immediately contacted the American representative of Siemens & Halske in New York, Dr. K. G. Frank, and told him that I understood that Siemens were working on beryllium, and that we were working on beryllium, too, and I would like to work out with him some basis of cooperation, for exchange of information, that we wanted to take such an attitude to anyone who was serious in the beryllium business, or had anything to contribute. I knew that they had done a great deal of work in metallurgy and found out a great deal about alloys from their publications.

On the other hand, we had done a good deal ourselves and might have something to contribute to them. At any rate, I would like to work out an exchange of information, if I could, with them. Dr. Frank was very nice and told me that the Siemens company had an arrangement with the Metal & Thermit Corporation, who were going to be the assignees of all the German patents, so he arranged—

The CHAIRMAN (interposing). What company is that? Where from; I mean, by what country chartered?

Mr. Cox. I think perhaps I might interrupt Mr. Gahagan's testimony and put on a witness from the Metal & Thermit Co. to explain the nature of the relationship that existed between it and the Siemens-Halske Co. in connection with patents.

The CHAIRMAN. Whatever you suggest, Mr. Cox.

(To the witness) Just answer the question. Is it an American company or German company?

Mr. GAHAGAN. It is an American company, as far as I know; yes, sir. The president of it is Dr. Hirschland, and immediately saw Dr. Hirschland with Dr. Frank and told him what I wanted to do, and Dr. Hirschland and I started some conversations which lasted about 3 years, and Dr. Frank finally worked—

Mr. Cox (interposing). Tell us what the nature of these conversations was.

Mr. GAHAGAN. Well, trying to find some formula whereby we could exchange for patents or have rights or do something; in other words, cooperate.

Mr. Cox. But you wanted a license under their patent?

Mr. GAHAGAN. I wanted a license under their patent and license them abroad under any of our patents abroad, or at least exchange information and cooperate closely. Dr. Hirschland never said he wouldn't. As a matter of fact, he was most cordial and always very helpful, but they apparently had no great interest in the beryllium business, and of course he was really not in a position to say what

Siemens would do or wouldn't do, as he was merely the representative for Siemens in the beryllium field. But they were not doing anything in the beryllium field, so after about 3 years I concluded that I wasn't getting anywhere talking with Dr. Frank.

Mr. ARNOLD. He had the patents in this country?

Mr. GAHAGAN. Yes; such as were issued; there were a great many still—

Mr. ARNOLD (interposing). In his own name?

Mr. Cox. I am going to develop that. If Mr. Gahagan will just step down for a moment now I would like to call Dr. Hirschland.

The CHAIRMAN. Doctor Hirschland, do you solemnly swear that the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Dr. HIRSCHLAND. I swear.

TESTIMONY OF F. H. HIRSCHLAND, PRESIDENT, METAL & THERMIT CORPORATION, NEW YORK CITY

Mr. Cox. Dr. Hirschland, will you give the stenographer your name and address?

Dr. HIRSCHLAND. F. H. Hirschland, president, Metal & Thermit Corporation, 120 Broadway, New York.

CORPORATE STRUCTURE OF THE METAL & THERMIT CORPORATION

Mr. Cox. Will you tell us briefly what the nature of the business of the Metal Thermit Corp. is?

Mr. HIRSCHLAND. We conduct chemical metallurgical business and have plants at Cartaret, N. J., Jersey City, East Chicago, Ind., and South San Francisco, Calif.

Mr. Cox. Under the laws of what State is the company incorporated?

Mr. HIRSCHLAND. New Jersey.

Mr. Cox. Is the stock of the company owned in the United States, do you know?

Mr. HIRSCHLAND. I would say about 99½ percent owned in the United States.

Mr. Cox. Now, Dr. Hirschland—

The CHAIRMAN (interposing). Mr. Cox, may I interrupt at that point? What is the authorized capital?

Mr. HIRSCHLAND. The authorized capital is, as far as I remember offhand, a million and a half preferred stock and I believe 150,000 common stock. I know the outstanding capital is about a half a million preferred stock and about 96,000 common shares, of no par value.

The CHAIRMAN. The common shares are no par?

Mr. HIRSCHLAND. Are no par.

The CHAIRMAN. The preferred shares?

Mr. HIRSCHLAND. Are \$100.

The CHAIRMAN. What is the interest rate of the preferred?

Mr. HIRSCHLAND. Seven percent.

The CHAIRMAN. Cumulative?

Mr. HIRSCHLAND. Cumulative.

The CHAIRMAN. Does the preferred stock have any voting power?

Mr. HIRSCHLAND. The preferred stock has voting power together with the common stock; yes.

The CHAIRMAN. What is the basis of that?

Mr. HIRSCHLAND. Share against share, as far as I remember, but I haven't looked at the bylaws recently. The company was chartered in 1908, if I remember correctly.

The CHAIRMAN. What privilege is attached to the common stock that is not attached to the preferred?

Mr. HIRSCHLAND. I don't quite understand your question.

The CHAIRMAN. What privilege is attached to the common stock which is not attached to the preferred?

Mr. HIRSCHLAND. None.

The CHAIRMAN. Why the two classes of stock, then?

Mr. Cox. Is there no priority in the payment of dividends?

Mr. HIRSCHLAND. Yes; the priority on payment of dividends is on the preferred stock over the common stock.

The CHAIRMAN. I wondered if it had any privilege.

Mr. HIRSCHLAND. The common stock has no particular privilege.

The CHAIRMAN. And the only difference is that the preferred stock has the priority of payment?

Mr. HIRSCHLAND. Limited to 7 percent.

The CHAIRMAN. I understood, in response to Mr. Cox, that you said that about 99½ percent of that stock is owned in this country.

Mr. HIRSCHLAND. That is correct.

The CHAIRMAN. Any subsidiary corporations?

Mr. HIRSCHLAND. Yes. Now, let me see, the Antimony Corporation has a capital, a very small capital.

The CHAIRMAN. I won't ask you to go into those details.

Mr. HIRSCHLAND. American Rutile Corporation.

The CHAIRMAN. How many subsidiaries are there?

Mr. HIRSCHLAND. These two are the only ones in which we, I believe, own 100 percent of stock.

The CHAIRMAN. Would you have a statement prepared showing the number of subsidiaries and the capital structure of each and submit at your convenience to the committee? ¹

Mr. HIRSCHLAND. Certainly.

The CHAIRMAN. And are these subsidiaries American corporations?

Mr. HIRSCHLAND. All American corporations.

The CHAIRMAN. Do you have any foreign subsidiaries?

Mr. HIRSCHLAND. No, sir.

The CHAIRMAN. Thank you.

Mr. Cox. You have about 600 stockholders all together. Is that correct? Holders of both common and preferred?

Mr. HIRSCHLAND. I really don't know. I would have guessed at 500, four to five hundred, but I don't know.

Mr. Cox. Not more than 500?

Mr. HIRSCHLAND. No; I don't think so.

Mr. Cox. Do you know whether any of that stock is held by corporations as distinguished from individuals?

¹ Mr. Hirschland subsequently supplied the information in a letter dated May 11, 1939. It was marked "Exhibit No. 538" and is included in the appendix on p. 2298.

Mr. HIRSCHLAND. Yes; a considerable block of stock is held by the American Can Co.

Mr. Cox. I am sorry I didn't get that name.

Mr. HIRSCHLAND. American Can Co. It is due to the business; a large part of our business is detinning of tin scrap.

ASSIGNMENT OF PATENTS BY SIEMENS AND HALSKE

Mr. Cox. Now, between 1929 and the date of 1930 and 1931, a number of patent applications were assigned to your company by Siemens & Halske, were they not?

Mr. HIRSCHLAND. That is correct.

Mr. Cox. And those patent applications had to do with processes relating to the production and fabrication of beryllium?

Mr. HIRSCHLAND. That is correct.

Mr. Cox. Can you tell us how those assignments happened to be made?

Mr. HIRSCHLAND. The relationship between Siemens & Halske and myself was a very intimate one ever since 1927 or 1928, and in 1929 I believe it was, during a visit to Germany, I had spent a few days in Berlin and visited Siemens & Halske, who then drew to my attention the new development in beryllium. Not being either a chemist or a metallurgist I really didn't know what beryllium was at first. They showed me their plans and asked me whether we, that is the Metal & Thermit Corporation, would become interested in beryllium as far as the American market was concerned. We had a general discussion on the subject, which, as far as I remember, ended with a request to send us some beryllium and we would try to sell it for their account. Beryllium was then selling in Germany, if I remember correctly, at one mark per gram, which was about \$120 to \$140 per pound in this country.

The relationship, as I said before, between Siemens & Halske and Metal & Thermit became more intimate. Once I received a letter from the manager of this particular department telling us the difficulties with certain patent applications in America. I know he spoke about only one at that time, one application, and he expressed a fear that perhaps there was discrimination against German inventors at the Washington Patent Office and that if we would prosecute the patent for him he would assign the patent to us. We told him at the time that we thought his fear of discrimination by any patent office was unfounded but if he wanted us to look after his patent interests we didn't see any objection and we would turn it over, without any obligation on our part that it would be properly prosecuted, to a patent attorney, whom we then engaged on our work, Charles F. Dane, who passed away about 3 or 4 years ago.

Mr. Cox. So far as Siemens & Halske were concerned, the purpose of the assignment of the patents to you was so that these patent applications could be prosecuted in the Patent Office by an American corporation. Is that correct?

Mr. HIRSCHLAND. Correct.

Mr. Cox. And you took the assignment of the patents merely for the purpose of prosecuting those patent applications through the Patent Office? Is that correct?

Mr. HIRSCHLAND. That is correct.

Mr. Cox. You didn't regard yourself as having any proprietary interest in those patents as distinct from the interests which Siemens & Halske had?

Mr. HIRSCHLAND. That is correct.

Mr. Cox. You were, in other words, merely prosecuting the patents and then holding them for the account of Siemens & Halske.

Mr. HIRSCHLAND. That is correct. Of course we had at that time in mind interesting ourselves in beryllium and we thought that this preliminary step was in line with our general interest which we had in it at that time.

Mr. Cox. Your purpose, I assume, then, after the patents were granted, was to reassign them to Siemens & Halske and to receive in return any expenses that might have been incurred. Is that correct?

Mr. HIRSCHLAND. I really don't remember, because at that time we were so much interested that we thought for a while, at least, that the patents would be made our property under a contract which had not been devised with Siemens & Halske.

Mr. ARNOLD. Was this arrangement entirely oral?

Mr. HIRSCHLAND. Oral. I looked through our files and I couldn't find any contract whatsoever made at any time with Siemens & Halske.

Mr. ARNOLD. If you had died, what would have been the protection that Siemens & Halske would have had?

Mr. HIRSCHLAND. I mentioned it in our office, which is well organized, in which the vice presidents of the corporation were familiar with this situation; I don't believe any difficulty would have arisen.

Mr. Cox. Of course, there were certain letters exchanged with respect to this arrangement, were there not?

Mr. HIRSCHLAND. There were certain letters exchanged, but even those letters refer more to the end than to the beginning.

Mr. Cox. They were the letters, in other words, describing the purpose for which the assignment was initially made without in your opinion indicating how the arrangement was to be terminated?

Mr. HIRSCHLAND. I think so; yes.

Mr. Cox. But the fact is that at one point in 1935 you did reassign these patents to Siemens & Halske, did you not?

Mr. HIRSCHLAND. Correct.

Mr. Cox. All the patents relating to beryllium?

Mr. HIRSCHLAND. That is correct.

Mr. Cox. And in connection with that reassignment an arrangement was made whereby you would receive payment for your expenses in prosecuting them through the Patent Office?

Mr. HIRSCHLAND. If I remember correctly, we were going to receive 10 percent of what the Beryllium Corporation would pay to Siemens & Halske, up to \$10,000, and I believe to date we have received about \$1,800.

Mr. Cox. But the total consideration for the reassignment was to be the \$10,000.

Mr. HIRSCHLAND. That is correct.

Mr. Cox. With whom did you deal at Siemens & Halske with respect to these patents? Do you remember the name?

Mr. HIRSCHLAND. It was in New York, Dr. Frank, K. G. Frank, and in Berlin the closest contact was with Dr. Illig. and I saw occasionally Professor Engelhardt.

Mr. Cox. You didn't have any dealings with Dr. Rohn?

Mr. HIRSCHLAND. I saw Dr. Rohn only years afterward in America; I never saw him in Berlin. I saw him, I believe, twice in New York.

Mr. Cox. I am going to hand you a letter addressed to you, signed V. Engelhardt, dated December 19, 1929. I ask you if that is one of the letters which you have referred to as relating to this assignment of the patents.

Mr. HIRSCHLAND. If I remember correctly this letter was written in German, but I believe this is a translation of the letter.

Mr. Cox. It is a document which was taken from your files.

Mr. HIRSCHLAND. I know, but it is marked, I believe, in our file "translation." I don't know who made the translation. I did not. But I believe it is, from my recollection, substantially correct.

Mr. Cox. I should like to offer that letter.

The CHAIRMAN. It may be received.

(The letter referred to was marked "Exhibit No. 477" and is included in the appendix on p. 2276.)

Mr. Cox. I have a photostat of a letter which is marked "translation," dated November 21, 1930, addressed to you, signed Dr. Engelhardt, and I ask you if that is a document which is taken from your files, and if you are reasonably satisfied that this translation is reasonably correct.

Mr. HIRSCHLAND. I have reason to believe that the translation is fair.

Mr. Cox. I should like to offer that.

The CHAIRMAN. This may also be received.

(The letter referred to was marked "Exhibit No. 478" and is included in the appendix on p. 2278.)

Mr. Cox. Now, Dr. Hirschland, I should like to have you look at another photostat of another letter addressed to Siemens & Halske, dated January 15, 1935, and ask you if that is a copy of the letter which you sent to Siemens & Halske.

Mr. HIRSCHLAND. Yes; that is correct.

Mr. Cox. Dr. Hirschland, I should like to read to you one sentence from this letter. It occurs in the fourth paragraph. The sentence reads as follows:

With reference to the patents and patent applications which we are holding a our name but solely for your account, we believe that they should be transferred from our name to you or some other nominee for you.

A moment ago you said that there was one point at which you weren't sure whether these patents and patent applications were going to be retained by your company under some arrangement with Siemens & Halske or whether they were in fact held merely for the account of Siemens & Halske. At least at the date this letter was written you regarded those patents and patent applications as held by you solely for the account of Siemens & Halske, did you not?

Mr. HIRSCHLAND. Yes, sir.

Mr. Cox. I should like to offer this letter also.

The CHAIRMAN. It may be received.

Mr. HIRSCHLAND. I emphasize "at that date."

Mr. Cox. At that date, very well, that is 1935.

(The letter referred to was marked "Exhibit No. 479" and is included in the appendix on p. 2278.)

Mr. Cox. You heard Mr. Gahagan's testimony with respect to negotiations with you, did you, Mr. Hirschland?

Mr. HIRSCHLAND. Yes, sir.

PATENT NEGOTIATIONS BETWEEN METAL & THERMIT CORPORATION AND
SIEMENS & HALSKE

Mr. Cox. In connection with those negotiations, did you conduct those negotiations on your own account or for the account of Siemens & Halske?

Mr. HIRSCHLAND. I don't remember negotiations with Mr. Gahagan in 1931 and 1932. I don't say that they didn't take place, but absolutely they have slipped my mind if they did take place. I remember the negotiations with Mr. Gahagan at the time after he had concluded his arrangement with Siemens & Halske.

Mr. Cox. You don't remember ever having talked with Mr. Gahagan before he made the agreement with Siemens & Halske?

Mr. HIRSCHLAND. I do not remember it; no.

Mr. Cox. Do you know whether anyone else in your company ever talked to Mr. Gahagan before he made that arrangement?

Mr. HIRSCHLAND. I don't believe—our Mr. Braid may have in a sales capacity, but I don't believe that patents or any such—I don't remember. I don't want to say I don't believe—I don't remember that any negotiations or anything took place except either immediately prior or immediately after his deal with Siemens & Halske.

Mr. Cox. You don't recall having told Mr. Gahagan prior to his deal with Siemens & Halske that if he wanted to get a license for those patents he would have to get it from Siemens & Halske?

Mr. HIRSCHLAND. As I say, I remember having heard something about negotiations just about the time when that took place, but don't remember whether it was immediately before or immediately after. I do remember when Dr. Frank came to me and told me that Mr. Gahagan was definitely interested in these patents. I do remember that Siemens & Halske at that time offered us those patents again, and I do remember having advised Siemens & Halske to make the deal with Mr. Gahagan, but I do not remember any conversations that I had or a member of my company had about that matter with Mr. Gahagan. No; I don't remember.

Mr. Cox. Siemens & Halske offered you the use of the patents under a license agreement.

Mr. HIRSCHLAND. Under a license agreement, the exploitation of their process. It went much beyond the license agreement to the exploitation of the patent. They wanted a royalty agreement, minimum royalties.

Mr. Cox. About what time was that, what year?

Mr. HIRSCHLAND. That started in 1929.

Mr. Cox. So all the time you were holding these patents, this negotiation was going on between you and Siemens & Halske with regard to patents.

Mr. HIRSCHLAND. I wouldn't say all the time but from time to time that question was discussed.

Mr. Cox. Did you have any conversations with Mr. Gahagan in 1935, about the time you wrote the last letter which I read to you? I assume from the statement in that letter, and from your reply

to my question about the statement, that you would not have granted Mr. Gahagan a license without going to Siemens & Halske for permission. Is that correct?

Mr. HIRSCHLAND. I had no right to do that.

Mr. Cox. Because you were holding those things solely for their account, as you stated in that letter in 1935.

Mr. HIRSCHLAND. I can't answer your question, because it never occurred to me. I can't answer hypothetical questions. It never occurred to me that I should or shouldn't. The question was never discussed.

Mr. Cox. You never discussed that with Mr. Gahagan?

Mr. HIRSCHLAND. Certainly not.

Mr. Cox. You are quite sure about that?

Mr. HIRSCHLAND. I can only go by my recollection, because those letters which were taken from the files, which I read over again, don't show any such conversation and I certainly don't remember any and I don't believe they took place.

Mr. Cox. That is your best recollection?

Mr. HIRSCHLAND. That is my best recollection.

Mr. Cox. I think perhaps there is one more letter, Mr. Hirschland, that we might introduce in the record. Have you looked at the photostatic copy of a letter which you addressed to Siemens & Halske?

REASON FOR PATENT ARRANGEMENTS BETWEEN METAL & THERMIT CO. AND
SIEMENS & HALSKE

Mr. HIRSCHLAND. I would like to read this letter, if I may [reading from "Exhibit No. 480"].

DEAR PROF. ENGELHARDT: Your letter of November 21 has just been received and I noted its contents. While we have no reason to believe that national interests influence the patent examiners in their findings, we will be very happy indeed to act for you in the applications on which you have difficulties at present, and we have discussed the matter today with Mr. Dane who also is very happy to prosecute these applications further for you.

Mr. Dane, however, has asked us to impress upon you that, while he is going to make every effort in his power, he does not want you to have the opinion that, because he was successful once, he will always be successful in future.

We ourselves will be very glad to give the matter every assistance possible. As you wrote in your letter that some of the applications require immediate attention, I have cabled you today as per enclosed copy.

With kind regards, I am,

Yours sincerely.

Mr. Cox. I would like to offer that letter, if I may.

The CHAIRMAN. It may be received.

(The letter referred to was marked "Exhibit No. 480" and is included in the appendix on p. 2279.)

The CHAIRMAN. Do you have a copy of the enclosed cable?

Mr. HIRSCHLAND. Is it not in those letters that were taken by you out of my files?

Mr. Cox. We couldn't find that.

The CHAIRMAN. Do you remember what was in the cable message?

Mr. HIRSCHLAND. May I quote from memory only. I would say:

Accept your proposition. Am writing you.

Mr. Cox. It was a confirmation.

The CHAIRMAN. This letter was merely a confirmation of the cable?

Mr. HIRSCHLAND. Correct.

The CHAIRMAN. There was nothing in the cable that was not confirmed in the letter?

Mr. HIRSCHLAND. That is my recollection.

Mr. COX. When you reassigned these patents to Siemens & Halske, do you remember what particular company the reassignment was made to?

Mr. HIRSCHLAND. I think it was made to Siemens, Inc.

Mr. COX. Is that a German corporation or an American?

Mr. HIRSCHLAND. I couldn't tell you.

Mr. COX. It has an office in New York?

Mr. HIRSCHLAND. Yes. I want to say this, I don't believe that at any time a statement was made by the officers of the Metal & Thermit Corporation that we wanted those patents.

Mr. COX. You don't think you ever made that statement?

Mr. HIRSCHLAND. I don't believe it.

Mr. COX. To anyone?

Mr. HIRSCHLAND. To anyone.

Mr. COX. You always regarded yourself as holding them for the account of Siemens & Halske.

Mr. HIRSCHLAND. I don't want to say that.

Mr. COX. You didn't own them yourself.

Mr. HIRSCHLAND. That is correct.

The CHAIRMAN. What did I understand your answer to be to that question?

Mr. HIRSCHLAND. There was always a question, do we own them, don't we own them; we probably don't own them but we have to find out when the final arrangement is made with Siemens & Halske, which final arrangement was never made.

The CHAIRMAN. Why was there any question in your mind as to whether or not you owned them?

Mr. HIRSCHLAND. I definitely did not own them, but we were hoping we would get them sometime in a general arrangement with Siemens & Halske.

The CHAIRMAN. I misunderstood you then. I thought you said there was always a question of whether you owned them or didn't own them.

Mr. HIRSCHLAND. Outright, we never owned them, there is no question about that.

The CHAIRMAN. Do you have any definite opinion in the mind of your corporation, so to speak, in the minds of the officers of the corporation, as to what your ownership was?

Mr. HIRSCHLAND. I don't think so. It was, as I said, an extremely loose arrangement between friends. It is incredible when I think about it today that a large corporation like Siemens & Halske, a tremendous corporation, and ours, would enter into such an arrangement, but it was a fact.

The CHAIRMAN. I have read these letters now for the first time and they seem to indicate that the letters which you received from Germany were written by some person who entertained a great deal of apprehension lest it would be possible to secure certain patents in the United States because of discrimination by the Patent Office against a foreign applicant, and therefore you were requested to use your

good offices through your company to get these patents by an American corporation.

Mr. HIRSCHLAND. No; it went way beyond that. There was really at that time a very close personal relationship between Dr. Illig and Professor Engelhardt on the one hand and myself on the other. It was a very personal relationship. We were good friends.

The CHAIRMAN. But aside from that personal relationship and this strong bond of friendship, there was an apprehension in the mind of your friend in Germany that he and his company could not for some reason get the patents that they desired in this country; is that correct?

Mr. HIRSCHLAND. I don't know about that either, because I discussed it with them. I know, the letter expresses it, but I discussed it later on with them, and it was more, I believe, oh, the feeling just at that moment when that letter was written. You know, we businessmen and inventors, and so on, act sometimes, and very frequently, on impulses, and while I will admit that that sentiment is expressed in that letter, I believe it was only the impulse of that moment.

The CHAIRMAN. If it was only the impulse of that moment, how do you explain that it is repeated throughout this correspondence?

Mr. HIRSCHLAND. It isn't. There are only two letters on the subject.

The CHAIRMAN. I have before me the letter of November 21, 1930, in which Dr. Englehardt said to you:

I cannot help feeling that in the office's opinion certain national interests in the United States of America play a role of some importance. We have discussed this previously and I believe you agree with that view.

What does he mean by that paragraph?

Mr. HIRSCHLAND. I have said I have always taken the position, and I take it very plainly in answer to that letter——

The CHAIRMAN (interposing). You did; it is quite clear in your letter.

Mr. HIRSCHLAND. That I definitely——

The CHAIRMAN. Oh, not definitely. This is what you say:

While we have no reason to believe that national interests should interest the patent examiners in their findings * * *.

Mr. HIRSCHLAND. All right.

The CHAIRMAN. That was not a very definite statement.

Mr. HIRSCHLAND. I think it is as definite as anybody can speak about people he doesn't know.

The CHAIRMAN. There is no controversy here.

Mr. HIRSCHLAND. Oh, I am really trying to give you all I know about it today. I know it was discussed in Berlin and I told him, if you will excuse the use of a slang expression, "You are all wet about these things, but if you want us to do it and if it is your impulse, all right, go ahead."

The CHAIRMAN. That is what was stated to you orally when you first talked the matter over in Berlin?

Mr. HIRSCHLAND. No; I don't remember whether it was after the first letter or whether it was after the second letter.

The CHAIRMAN. What was the expression in the first instance that was given to you as to the reason why you were being invited to

make the application for these patents in the name of your corporation?

Mr. HIRSCHLAND. That is in that letter. It is that first letter. They got worried that there was discrimination in 1929 or 1930.

The CHAIRMAN. In other words, they felt there was discrimination.

Mr. HIRSCHLAND. They felt there was discrimination. I told them, "you are all wet, but if you feel like it, go ahead."

Mr. Cox. They had one application rejected at one time, hadn't they?

Mr. HIRSCHLAND. Yes.

The CHAIRMAN. It wasn't clear in your mind just what rights you were acquiring by the action you were taking?

Mr. HIRSCHLAND. That is correct.

The CHAIRMAN. Then are we to understand that you took the action merely as a friendly gesture, thinking that the patents were not of any great importance?

Mr. HIRSCHLAND. I wouldn't say of no great importance. If you will repeat what you said in the beginning without "the patents of no importance," I accept your statement in full.

The CHAIRMAN. Why do you want to eliminate that?

Mr. HIRSCHLAND. I didn't know whether the patents were of importance at that time. I knew the process was interesting. I knew beryllium was possibly a coming matter. I knew the Metal & Thermit Corporation might, if it could be arranged, want to go into that later.

The CHAIRMAN. What did Dr. Engelhardt mean in his letter of November 21, 1930, when he said, "I cannot help feeling that in the Office's opinion certain national interests in the U. S. A. may play a role of some importance"?

Mr. HIRSCHLAND. German national interests. He felt he was discriminated against, and I felt he had a bad lawyer. I don't remember who he was.

Mr. ARNOLD. Did you represent to the Patent Office that you would own the patents? Your company would own the patent?

Mr. HIRSCHLAND. No; certainly not.

Mr. ARNOLD. There is no requirement in the patent law that you tell for whom you are taking out the patents

Mr. HIRSCHLAND. No.

Mr. ARNOLD. Well then, whether it was a friendly gesture or not, the purpose of your taking out these patents in your name was to conceal the real ownership.

Mr. HIRSCHLAND. I wouldn't admit that at all.

Mr. ARNOLD. What other purpose was there?

Mr. HIRSCHLAND. I don't remember, but I wouldn't admit that at all.

The CHAIRMAN. My interpretation of that paragraph which I have read was that the national interests to which the author of the letter referred were national American interests of some kind. Am I mistaken in that?

Mr. HIRSCHLAND. I believe you are mistaken.

The CHAIRMAN. Do I understand that you had no consideration for this activity except the agreement for a payment of \$10,000?

Mr. HIRSCHLAND. Would you mind asking the question again?

The CHAIRMAN. Do I understand the only consideration you or your

company received for this activity in securing these patents was the \$10,000 payment referred to here?

Mr. HIRSCHLAND. All we ever received—now wait a moment, I want to answer a little broader than your questions. We became interested in 1929 in beryllium. We did considerable work for Siemens & Halske in beryllium between 1929 and approximately 1935. We also sold, I believe, two and a half pounds of beryllium at about \$140 or \$150 a pound for Siemens & Halske. We helped to prosecute these patents, and in about 1935—but it may have been 1934—again during a visit to Germany, where I went quite regularly to visit my mother, Siemens & Halske came to Essen where I lived and said, “We would like to make an arrangement with the Beryllium Corporation and Thermit.” We talked the matter over and I advised them that we could not meet the terms and would not care to go into an arrangement such as they offered us at that time.

I said, “We have done considerable work for you for 5 years. I think you should reimburse us somehow,” and the amount of \$10,000 was set, and as I say, we have received to date \$1,800, approximately, and that is all.

The CHAIRMAN. No other consideration of any kind?

Mr. HIRSCHLAND. No other consideration of any kind.

The CHAIRMAN. What was the arrangement that was offered to you which you rejected?

Mr. HIRSCHLAND. That we should begin manufacture in America—now I am quoting from memory—on the basis of paying royalties of a certain percentage of the sales price, with minimums ranging I believe between 10 and 25 thousand dollars per year.

Dr. LUBIN. Mr. Hirschland, can you tell the committee just what you have in mind when you say that between 1929 and 1935 you did considerable work for Siemens in the field of beryllium? You mentioned the fact that you sold several pounds.

Mr. HIRSCHLAND. We tried to keep them informed of anything relative to beryllium which would further or hinder the erection of the beryllium business in America. At this time we didn't know when we started this business of the existence even of the Beryllium Corporation or Mr. Gahagan's concern. We heard that much later.

It was at this time our wish to bring to America a beryllium industry in conjunction with Siemens & Halske. They informed us of everything that was going on, and we informed them in order to find out how our business could be developed, just the same way as I had done before in our detinning industry and our thermit business, where I had worked with German interests and where really an industry was built up which I believe has helped American labor and American capital to a considerable extent; that is, German inventions, bringing them over here, developing them in the interest of American industry and capital and labor.

The CHAIRMAN. How large a corporation is Siemens & Halske?

Mr. HIRSCHLAND. I don't know in dollars and cents, but it is one of the largest in the world, as Mr. Gahagan said.

The CHAIRMAN. The description was correct?

Mr. HIRSCHLAND. Yes. I would say the size of General Electric, but I don't know whether it was larger or smaller. It is a tremendous enterprise, very well run, beautifully run.

The CHAIRMAN. Do you still have an association with that company?

Mr. HIRSCHLAND. No, no.

The CHAIRMAN. You do not represent them now with respect to any of these patents?

Mr. HIRSCHLAND. No, no.

The CHAIRMAN. That relation is completely broken off?

Mr. HIRSCHLAND. Completely.

Mr. COX. That \$10,000 which you were paid, Mr. Hirschland—

Mr. HIRSCHLAND. I wasn't paid \$10,000.

Mr. COX. Your company?

Mr. HIRSCHLAND. The company was paid \$1,800 to date.

Mr. COX. I will strike that and put it this way. The \$10,000 which your company was to receive was to be paid in the form of a percentage of all the royalty payment made by Mr. Gahagan?

Mr. HIRSCHLAND. To Siemens & Halske, that is right; yes.

Mr. COX. Correct? And to date the percentage on those royalty payments has only amounted to \$1,800?

Mr. HIRSCHLAND. That is the way I was told in my office.

Mr. COX. I wanted to have it appear why, although your total consideration was \$10,000, you did only receive \$1,800.

Mr. HIRSCHLAND. It was 10 percent of what they paid Siemens & Halske.

Mr. COX. Up to \$10,000?

Mr. HIRSCHLAND. Up to \$10,000.

Mr. COX. I think I have finished with the witness.

The CHAIRMAN. Do any members of the committee desire to ask the witness any questions? It is a quarter after 12 and if no members of the committee desire to pursue the inquiry further we will recess until this afternoon at 2:30, and you are willing that the witness shall be released now?

Mr. COX. I think so; yes.

The CHAIRMAN. Thank you very much, sir. The committee stands in recess until 2:30.

(Whereupon at 12:15 p. m., a recess was taken till 2:30 p. m. of the same day.)

AFTERNOON SESSION

The committee resumed at 2:45 p. m. on the expiration of the recess.

The CHAIRMAN. The committee will please come to order.

TESTIMONY OF ANDREW J. GAHAGAN, PRESIDENT, THE BERYLLIUM CORPORATION, READING, PA.—Resumed

The CHAIRMAN. I should have made note this morning at the opening of the session that the committee is honored by the presence of Congressman Sam Hobbs, of Alabama, and Congressman James M. Barnes, of Illinois, both members of the Judiciary Committee of the House of Representatives. They have come here, having been interested in proceedings of this committee, by invitation of Judge Sumners, chairman of the Judiciary Committee; and I want them both to understand that they are at perfect liberty to ask any questions that may occur to them.

That isn't directed at you, Mr. Gahagan. Mr. Cox, are you ready to proceed?

PATENT NEGOTIATIONS BETWEEN BERYLLIUM CORPORATION AND SIEMENS
& HALSKE

Mr. Cox. Mr. Gahagan, when we interrupted your testimony this morning you had begun to tell us about negotiations which you had in this country with representatives of Siemens-Halske and with representatives of the Metal and Thermit Co. with respect to the patent rights on beryllium and beryllium processes. Will you go on now with that story and tell us exactly what you did in connection with those negotiations?

Mr. GAHAGAN. Well, Dr. Hirschland's testimony was a very good description of the difficulties that I had in getting anywhere. For some 3 years, nearly, I had various conferences with the representative of Siemens & Halske and although Dr. Hirschland doesn't remember it, as it might not have been of great importance to him, I had several interviews with him also, and I couldn't find out whether Metal and Thermit owned the patents or whether they didn't own them, or whether Siemens were going into the beryllium business in the United States or whether they were not going into the business.

That left us in a rather precarious position, because if we continued our development, by this time we had spent considerable money and a few years' work; if we continued the development we might find after 5 or 10 years a lot of overhanging patents, owned by Siemens, which would be held against us and we would be told some day, "Well, you can't operate any more," or "You can't make beryllium-copper and heat treat it, or you can't use beryllium copper alloys for certain specific purposes, or you can't heat treat beryllium nickel," and so forth, and the customers we had, or hoped to have in the future, might also be embarrassed.

You see we had a situation with which I was familiar before the war; a number of patents in dyestuffs were taken out in this country and as a result no dye businesses were started in this country. The patents were held merely as you are more familiar with than I am, merely as a means of preventing a business in this country. I didn't know but what, to be quite frank, that was the situation. I didn't know whether that was the situation or not.

After talking with Dr. Frank on repeated occasions, and with Dr. Hirschland on several occasions, I finally got tired of that and made up my mind that I would talk with Siemens & Halske in Germany, and either find out whether they were going to agree to something with me, or they were not, so I wrote Siemens a letter, Dr. Illig, head of the research department of Siemens, and told them I was taking such and such a boat and bringing a lawyer with me to sign a contract or not, but that I didn't want to continue discussions for the next 5 or 10 years.

Mr. Cox. What year was that?

Mr. GAHAGAN. December 1933. I know that very well because I arrived in Germany on December 18, and I waited until December 28 for my first appointment.

After negotiations for some few weeks we finally came to an agreement.

Mr. Cox. Whom did you negotiate with?

Mr. GAHAGAN. I was told, in reply to my letter I got a telegram to meet Dr. Rohn, of the Heraeus-Vacuumschmelze Co.

Mr. COX. There have been several references this morning to Dr. Rohn. Will you tell us who Dr. Rohn was?

Mr. GAHAGAN. Dr. Rohn was quite a remarkable man. As a matter of fact, he is the most interesting person I have known in my experience. He was an adjutant on the German Staff during the World War, and as a matter of fact was wounded about 20 miles from Paris. He came back to Hanau and worked for the Heraeus Co., who controlled the platinum business of the world before the war. He worked out vacuum-furnace melting for the Heraeus Co. They melt platinum, gold, silver, and precious metals, and this was so successful that he induced Dr. Heraeus to let him go ahead with the company to produce other metals by vacuum melting.

Dr. Heraeus went to the German Government, the Reichstag, and got funds with which to put up the Heraeus Vacuumschmelze.

Mr. COX. That is the company Dr. Rohn was connected with?

Mr. GAHAGAN. Yes.

Mr. COX. He was president of that?

Mr. GAHAGAN. Yes.

Mr. COX. What was his connection with Siemens & Halske?

Mr. GAHAGAN. Dr. Rohn developed some very remarkable wire-rolling equipment and other equipment that exists nowhere else in the world, and his connection with Siemens started by reason of the fact that he came to Berlin in 1929 or 1930 and purchased beryllium from them, and in a few weeks came back with some beryllium nickel alloy on which they secured a patent but which they had not succeeded in producing successfully commercially.

He worked out a deal with them for exclusive rights on beryllium nickel for surgical instruments and dental instruments. A few months later, it would be something else, and finally Siemens woke up to the fact that to fabricate beryllium alloys properly you would need specialized equipment, and so they bought out control of the Heraeus-Vacuumschmelze Co. in the latter part of 1933.

Dr. Rohn has the most wonderful metal-working plant I have ever seen in the world at Hanau, near Frankfurt, the equivalent of many millions of dollars in this plant, and equipment that will produce alloys, that will produce results that I don't believe can be duplicated anywhere else in the world. I think most prominent metallurgists will bear me out in that statement.

Mr. COX. It was with Dr. Rohn you negotiated with respect to these patent rights?

Mr. GAHAGAN. That is right.

Mr. COX. And you said a moment ago those negotiations resulted in an agreement.

Mr. GAHAGAN. They finally resulted in an agreement. I might say that before I went to Germany I went to Dr. Hirschland and told Dr. Hirschland I was going to Germany to try to get Siemens & Halske to make a contract with us, exchange of patents, technical information, and so forth, and tried to get him to cancel any contract that they might have with him. I couldn't find out what the contract was.

Mr. HENDERSON. Mr. Gahagan, you are very sure in your mind that your conversations with Mr. Hirschland antedated anything that he could recall this morning?

Mr. GAHAGAN. Yes; I am sure of that.

Mr. HENDERSON. And this particular incident of which you speak was before you went to Halske with your own personal negotiations?

Mr. GAHAGAN. That is right.

Mr. HENDERSON. You were in effect putting him on notice that you were going to attempt direct negotiation with those who you thought were the real owners of the patents.

Mr. GAHAGAN. That is right, sir. I wanted to do that. He would find it out in any case and I asked him to help me, and Dr. Hirschland told me that he was rather surprised at my frankness, and he appreciated it, and in view of that he would do all that he could to help me, and I don't believe I would have been able to work out a contract with the Siemens Co. if I had not had the cooperation of Dr. Hirschland. In other words, he might have been able to have blocked it. Instead of that, he was very cooperative, and I saw him a number of times when I returned from Germany.

Mr. Cox. Mr. Gahagan, do you know whether at this time in 1933 these patents were held in this country in the name of Siemens & Halske or in the name of Metal & Thermit Corporation?

Mr. GAHAGAN. Some of them were in the name of Metal & Thermit Co. Most of the patents were issued shortly after that in 1934. In other words, the thing that I feared most was not the patents that were issued but what I knew must be a lot of patent applications in the Patent Office.

Mr. Cox. Do you know whether at this time those applications were in the name of Metal & Thermit Co.?

Mr. GAHAGAN. Yes; they were assigned to Metal & Thermit Co., because they were retransferred to Siemens, Inc., in New York, after our contract was signed, and on those we have the exclusive right in the United States with the right to sublicense.

Mr. Cox. I want to ask one more question about the situation in 1933. Although at that time you couldn't find out what the exact nature of the relationship was, you were sufficiently satisfied that Siemens & Halske had an interest in these patents even though they weren't in their name that you were prepared to go to Germany and negotiate with them?

Mr. GAHAGAN. I knew they had an interest directly because all the patents were taken out by a scientist on the staff of Siemens & Halske and they were German patents in some instances or Canadian patents or English patents corresponding to the application, so I had a very good idea of the nature of the United States application and patents, of course, that were issued. I knew they belonged to Siemens.

Mr. Cox. To go back to the terms of the agreements you made with Siemens & Halske, the terms of that agreement were substantially settled by you and Dr. Rohn?

Mr. GAHAGAN. By me, Dr. Rohn and directors of the Siemens & Halske Co., Dr. Schwenn, the managing director and all of the directors. No contract is made with Siemens & Halske without the approval of every director. And as far as I know they have no other contract in this country, in the world, similar to our

contract with them except that I do know they have one with Westinghouse Co. in the United States, an exchange of patents and technical information. In other words, anything the Westinghouse Co. works out here belongs to Siemens & Halske in Europe, or in Germany, and vice versa.

Mr. COX. Mr. Gahagan, I am going to show you this document and ask you if that is a correct copy of the agreement as it was first prepared, calling your attention to the fact that the list of patents and patent applications which was apparently attached is not attached to that copy.

Mr. GAHAGAN. Yes; this is the contract, copy of it rather.

Mr. COX. With the exception of the list of patents.

Mr. GAHAGAN. That is right.

Mr. HENDERSON. Before he asks that, could I for my own information ask the witness a question? You say anything that Westinghouse works out in this country is available to Siemens & Halske. That is in the electric line?

Mr. GAHAGAN. In the electric line, certain specified lines.

Mr. HENDERSON. You are not speaking of beryllium?

Mr. GAHAGAN. Oh, no, sir; I am talking of a similar contract to the one we have with Siemens on beryllium. You see, Siemens are interested in a great many businesses. Their principal business is electrical equipment.

Mr. HENDERSON. It is the heavy electrical equipment particularly?

Mr. GAHAGAN. Yes, sir; and as I have described this morning it is an enormous company. They have in the Berlin plant alone over 150,000 employees and they have a number of plants, agencies, all over the world.

The CHAIRMAN. Do you know anything about the capital structure?

Mr. GAHAGAN. No, sir; I don't. It is available. They have gotten bonds here in the United States. I know, from time to time floated bonds. They roughly carry, I have been told, the equivalent of about \$200,000,000 in cash at all times.

The CHAIRMAN. Have you any idea how many stockholders there are?

Mr. GAHAGAN. I haven't the slightest idea. I think all that would be public records, for it is a very large company. The stock, I understand, is very largely held by the Siemens family, but I know any number of people in America who have stock in the Siemens Co.

The CHAIRMAN. Mr. Cox, I think it would be very illuminating if you could secure from the proper financial sources a statement of the capital structure, stock ownership, and so forth, of the company and insert it in the record as an exhibit.¹

Mr. COX. We shall do that.

NEGOTIATIONS RESULT IN CROSS-LICENSING AGREEMENTS

Mr. COX. At that time, the time you made this agreement, the Beryllium Corporation had certain patents on the process of producing beryllium?

Mr. GAHAGAN. Yes; and some alloy patents.

¹ The statement was later submitted and is included in the appendix on p. 2303

Mr. Cox. And this agreement was a cross-licensing agreement under which you granted a license to Siemens & Halske under your patents and they granted licenses to you under theirs?

Mr. GAHAGAN. That is right.

Mr. Cox. It included all patents which might thereafter be acquired which related to beryllium?

Mr. GAHAGAN. That is right.

Mr. Cox. The agreement gave each party certain exclusive rights in certain territory. Is that correct?

Mr. GAHAGAN. Yes.

Mr. Cox. And under the agreement your exclusive territory was the Western Hemisphere?

Mr. GAHAGAN. That is right, North and South America.

Mr. Cox. In that territory you had the exclusive right to use these patents and to grant some licenses under them?

Mr. GAHAGAN. Yes, sir; and the right to any equipment or drawings on any equipment, which is an extremely important provision.

Mr. Cox. Under the agreement Siemens & Halske had corresponding rights in their exclusive territory; is that correct?

Mr. GAHAGAN. That is right.

Mr. Cox. What was their exclusive territory?

Mr. GAHAGAN. Europe. The rest of the world was free territory.

Mr. Cox. Free territory. At this point I should like to offer that agreement in evidence, if I may.

The CHAIRMAN. Mr. Cox, are you going to proceed to develop the results of this contract?

Mr. Cox. Yes; we are going into that. I may not do that this afternoon, but we are going to before the hearings are over.

The CHAIRMAN. The contract may be admitted.

(The contract referred to was marked "Exhibit No. 481" and is included in the appendix on p. 2279.)

INTEREST IN BERYLLIUM MANIFESTED IN ENGLAND

Mr. Cox. There is one modification I wanted to have Mr. Gahagan tell us about now; the modification to which I refer is the one which permitted you to exercise certain rights in England. Will you tell us about that, Mr. Gahagan?

Mr. GAHAGAN. Well, last year when I was going to Europe I was told that a Mr. Jamieson in England was one of my stockholders and that he wanted me to be sure to see him in England. As a matter of fact, he more or less gave me a command to look him up in London. Mr. Jamieson is the chairman of the board of the Vickers Co. The Vickers Co., as you all probably know, is the largest manufacturer of airplanes in England. I was rather surprised at this because I didn't know I had any such stockholder or any stockholder at all in England, so I called on Mr. Jamieson and asked him why he had such an interest in beryllium. He told me he was very interested in beryllium because he considered that it would probably be a most important metal from a military point of view in the next world war, and I asked him why. He said, "We are entirely dependent upon the Malay Straits and Bolivia for tin, for the manufacture of bronze. The Malay States might be cut off. The few tin mines in Bolivia might be blown up and beryllium copper would be the only thing we could

use for certain purposes, and beryllium copper is much better than tin bronze. Therefore, I think beryllium copper is extremely important and I wanted to become one of your stockholders to follow your development." As a matter of fact, curiously enough, about every 6 months I have some representative of the British aviation, military attaché, or someone in Washington call on me to find out what we are doing and how we are getting along. They have been doing that for the past 10 years.

Well, Mr. Jamieson then said, "You have a contract with Siemens & Halske, and collateral agreements with other companies."

I said, "Yes, sir; we have."

He said, "You have a provision in that contract whereby you turn over everything to Siemens & Halske in Europe and you agree not to sell in Europe."

I said, "Yes, sir; we have. I am very surprised, however, that you know that because as far as I know there are only three copies of that. One is in my safe, one is in the safe of Siemens & Halske in Berlin, and the other is in Dr. Rohn's safe at Hanau."

He said, "I know it. How I found it out I can't tell you, but," he said, "you are going to modify that contract, because England will not be dependent upon Germany for any military needs."

He said, "We are doing a great deal of experimental work in Rolls-Royce, Vickers, and other companies in England on beryllium copper and beryllium nickel, and we are buying those materials for experimental purposes in Germany, but we are not going into production on any item unless we can secure our supplies from you entirely or from you as a second source of supply. We don't mind being dependent on you for a source of supply because we are dependent on the United States for a great many metals in any case, but we are not going to be dependent on any nation on the Continent."

He said, "I want you to modify that contract."

I told him, "Well, I have no way of modifying the contract. After all, I have signed it and I expect to live up to it."

He said, "Well, I'll take care of it. When are you going to Germany?" And I told him within a few days, that I would be there for some 3 or 4 weeks. So, after I had been there about 10 days, two unofficial representatives of the German Government came over and talked with Dr. Rohn, and we argued and discussed for about 3 days—I didn't do much discussing or arguing, but I listened to it. The British said, "If you don't modify that contract and permit importation from the United States we are going to confiscate all of your patents, and Mr. Gahagan's patents in England; we are not going to permit some international agreement whereby we are held up for military purposes."

I didn't know under what provisions or how they were going to be able to do that, apparently neither did Dr. Rohn, because he said, "You can't do that. After all, we are not in a war with England—Germany isn't and you can only expropriate patents in time of war."

He said, "Oh, yes; we can do that."

The CHAIRMAN. Who said?

Mr. GAHAGAN. Mr. Giller, from England.

The CHAIRMAN. What is his full name?

Mr. GAHAGAN. Fred Giller.

The CHAIRMAN. Does he have any official position?

Mr. GAHAGAN. No official position.

Dr. LUBIN. I think you said these two unofficial representatives were from the German Government; I think you meant the British Government?

Mr. GAHAGAN. The British Government; yes. That clause there, I think you know.

Mr. COX. We don't know exactly what these Englishmen had in mind. There is, however, a provision in the English statute which permits the Board of Trade, under certain conditions, to compel the issuance of a license under an English patent and one of the conditions under which that issuance may be compelled is when the patent is held in England but is not being worked there. That may have been the provision to which these men were referring. It is the closest thing we can find in the statutes to anything which would permit them to exercise that kind of power. It falls short of confiscation, of course, but it does mean the patent can be worked without the payment of royalties.¹

The CHAIRMAN. Well, the British have a way of asserting what we would call public interest and they call it Empire's interest, over any private contract or private understanding.

Mr. GAHAGAN. You can't take out a patent in England and just sit on it.

Mr. COX. Was the contract modified then?

Mr. GAHAGAN. Very curiously, the contract was modified, made effective the first of this year; under the terms of that we are permitted to sell to England.

Mr. EICHER. Mr. Gahagan, this morning on the map that you displayed when you indicated the sources of beryllium ore-bearing supply over the world, I noticed there were no tacks over continental Europe. What are the sources of supply and how beneficial are they for Germany?

Mr. GAHAGAN. I don't know, of course, where the Germans get all of their supplies; I think they get most of it from the Argentine. There are some rumors of beryl in Austria. I followed up one of those rumors at one time by having an engineer friend of mine over there—well, as a matter of fact, this engineer was over there for the Newmont Mining-Co., and I asked Fred Searles to have this engineer check into this property, and he found no beryl. We hear a great many rumors about it. As far as I know, there is no beryl, certainly anything that looks like it in any quantity, on Continental Europe, except in Russia.

Mr. COX. Under this agreement you pay royalties to Siemens & Halske on their inventions and they pay royalties to you on yours, is that correct?

ROYALTY PAYMENTS BETWEEN BERYLLIUM CORPORATION AND SIEMENS & HALSKE

Mr. GAHAGAN. No; I modified that. Under the terms of our original agreement we paid them a royalty on the beryllium content of all materials that we sold, and that gave us the right to use and practice inventions of Siemens & Halske, or to pass on to any customer of ours the right to use and practice these inventions, such as

¹ See footnote on p. 2058, *infra*.

heat treatment, or use of the alloys for any specific purposes, so we could protect our customers, and we paid them a royalty on the lowest wholesale price, the amount of beryllium that we sold figured at the lowest wholesale price. The Germans in turn paid us a royalty on all that they sold. The purpose of that was so that we would each have a great deal of interest in passing on to the other all information available in order to try to build up the other fellow's price. In other words, if the Germans had some revenue out of our business, any continuing revenue, they would have just a little more incentive to make sure that they passed on to us quickly any technical advantage that they might have, or commercial possibility.

The unfortunate thing about that is, the German Government started a tax on the income in Germany to such an extent that, particularly foreign corporations or foreign people who receive income in Germany, that the net result of it was that although we got this royalty on the sales in Germany or in Europe, we got it on paper. We didn't actually get it, because most of it was taxed away. So that when I was over there last summer I suggested just doing away with this royalty completely.

The set-up now is that we pay Germany a much smaller royalty, and they pay us nothing.

Mr. COX. 10 percent of the royalties which you owe to Siemens & Halske under this agreement, you pay to Metal & Thermit?

Mr. GAHAGAN. As per their instructions. I think Dr. Hirschland is very wrong about the amount, though. It is considerably more than he knows about.

Mr. COX. You think it is more than \$1,800?

Mr. GAHAGAN. Oh, Lord; yes.

Mr. COX. The effect of this agreement is that you cannot engage in the manufacture of beryllium in any country outside of the Western Hemisphere. Is that correct? Except in England?

Mr. GAHAGAN. We couldn't engage—it is tantamount—our agreement is that we will not produce nor sell nor permit any of our customers to sell in France, Germany, Italy, or any country in Europe, with the exception of England, and the sales that we make to England must be made through a certain definite channel.

Mr. COX. Is that specified?

Mr. GAHAGAN. That was specified as agreeable to the English, apparently to the English Government, and agreeable to Germany and to ourselves.

Mr. HENDERSON. You mean a certain specified company?

Mr. GAHAGAN. A certain specified company.

The very curious purpose of that apparently is so that Rolls Royce or any company in England can be buying British. In other words, we couldn't sell direct to Rolls Royce.

Mr. ARNOLD. That is, they set up what might be called a dummy corporation to whom you do sell, and you can't sell to anybody else except that dummy?

Mr. GAHAGAN. That is right.

Mr. COX. I think that this concludes one phase of Mr. Gahagan's testimony. We have some other witnesses here that I would like to

put on, but if the members of the committee have any questions they would like to ask—

The CHAIRMAN (interposing). I think it is possible that the members will want to ask Mr. Gahagan a few questions. I know that I would like to.

Do you know what the present relationship is between the Siemens Co. and the German Government?

Mr. GAHAGAN. No, sir; I haven't the slightest idea.

The CHAIRMAN. You have pretty close relations with the company?

Mr. GAHAGAN. Yes, sir.

The CHAIRMAN. It is a matter of some importance to you to know whether you are dealing with the German Government or with a German corporation.

Mr. GAHAGAN. I feel quite certain that I am dealing with a German corporation.

The CHAIRMAN. Isn't it a matter of fact that under the present regime in Germany the Government has absolute control over this corporation?

Mr. GAHAGAN. I don't believe so.

The CHAIRMAN. You think it is an independent agency that can act free of the judgment of the German Government?

Mr. GAHAGAN. No; I don't think any business or any individual is completely free to the extent, for example, that this contract, any foreign contract that a German company makes must have the approval of the German Government before it is signed. It must be registered with the Government.

The CHAIRMAN. So that actually, is there not a little ground for believing that your company has an arrangement with the German Government through this corporation?

Mr. GAHAGAN. I don't think so. If it is, I know of no more than Siemens & Halske have an arrangement with the United States Government because we are in the United States. I mean, the German Government may own Siemens & Halske completely. I don't think so. I think it is a public company. I know people who have stock in it. But now just what control the Government of Germany has over Siemens & Halske I don't know.

The CHAIRMAN. The Government of Germany exercises pretty close and complete control over all commercial enterprises within its boundaries, does it not? Isn't that the impression you have?

Mr. GAHAGAN. That is the impression I have.

The CHAIRMAN. Now the Beryllium Corporation: When was that created?

Mr. GAHAGAN. In 1929.

The CHAIRMAN. Where?

Mr. GAHAGAN. Delaware.

The CHAIRMAN. What is the authorized capital?

Mr. GAHAGAN. 200,000 shares of common, 5,000 shares of preferred.

The CHAIRMAN. What is the distinction between the two?

Mr. GAHAGAN. Preferred has cumulative dividends after 1941 of 5 percent, as I remember.

The CHAIRMAN. Any difference in the voting power?

Mr. GAHAGAN. Preferred has no voting power unless the common default.

The CHAIRMAN. How many stockholders do you have?

Mr. GAHAGAN. I should say about 100 or 150.

The CHAIRMAN. Where do they reside?

Mr. GAHAGAN. Most of them are friends of mine, around the eastern part of the United States, some of them in California, a few of them in Detroit, Mr. Jamieson in England.

The CHAIRMAN. What are the assets of the corporation now, so far as published statements go?

Mr. GAHAGAN. About \$3,500,000.

The CHAIRMAN. Of what do they consist?

Mr. GAHAGAN. Patents, land, buildings, equipment.

The CHAIRMAN. Where is the land?

Mr. GAHAGAN. I shouldn't have said land. I have a plant on which I have an option to purchase, in Reading, Pa.

The CHAIRMAN. What company control do you have over your source supplies of beryllium?

Mr. GAHAGAN. The control we have is just buying, that is all.

The CHAIRMAN. You don't own any deposits yourself?

Mr. GAHAGAN. No, sir. I did but I don't any more.

The CHAIRMAN. I understood your testimony this morning to be that there are abundant supplies of beryllium.¹

Mr. GAHAGAN. I believe there are. They are widely scattered.

The CHAIRMAN. What is the fact? Are there? You say you believe there are. That is a sort of qualified answer.

Mr. GAHAGAN. The only way I can make that answer is to qualify it. To know what is definitely in the ground requires diamond drilling, and so forth. You can spend thousands of dollars on it.

The CHAIRMAN. I am wondering whether your researches have demonstrated that there are abundant visible resources of this metal.

Mr. GAHAGAN. We believe there are; yes. In other words, we have seen outcroppings of beryl and of other minerals over very widely scattered areas, and each year as we have purchased beryl there has been considerably more than we required, and it is offered to us in increasing quantities each year.

The CHAIRMAN. But your corporation owns none itself?

Mr. GAHAGAN. No, sir.

The CHAIRMAN. I gathered from your testimony that a little of this goes a long way.

Mr. GAHAGAN. That is right.

The CHAIRMAN. How much beryllium have you used in terms of tons from the time you started manufacturing? Could you approximate that?

Mr. GAHAGAN. About 1,000 tons, I think. I have given the committee the figures.

The CHAIRMAN. It wasn't developed in the testimony. What is the value of that?

Mr. GAHAGAN. The average price is about \$60; about \$59.15.

The CHAIRMAN. So you have actually worked with about \$60,000 worth of beryllium.

Mr. HENDERSON. Is that price per ton or per pound?

Mr. GAHAGAN. \$60 a ton, and we have used about 1,000 tons.

¹ Supra, p. 2013.

The CHAIRMAN. So you have had about \$60,000 worth of this metal.

Mr. GAHAGAN. That is right; of the ore.

The CHAIRMAN. Then the value in the output is not so much in the material as in the "know how" of putting it together; is that right? I understood you to say you had about \$3,000,000 worth of assets.

Mr. GAHAGAN. Yes.

The CHAIRMAN. But you have had \$60,000 worth of the metal. There is a big difference between 60,000 and 3,000,000.

Mr. GAHAGAN. Unfortunately there is. You start out on a program of research. Now it is very simple for us to go to somebody, and it was simple a few years ago, and say, you take beryllium and mix 2 percent of it with copper, and you do so-and-so with it, and you heat it in this, that, and the other way, and you will get these results.

The CHAIRMAN. You pointed out this morning that there is a great deal of preliminary work and technical work which must be done to make possible the development of any new industry; that is true, but I was trying to get at an idea of what the value of the output is.

Mr. GAHAGAN. I can tell you this, I have spent a great deal more than \$60,000 on ore research because I didn't want to build a business up and then find we had a lot of uses for beryllium but there is no ore. Why go to the trouble of spending money in metallurgical research, getting a business built up, if you had no ore? We have in mind a few locations that we believe have massive deposits.

The CHAIRMAN. What possibilities are there of competition in this industry?

Mr. GAHAGAN. The same as in any business.

The CHAIRMAN. Do you have any competitors?

Mr. GAHAGAN. Yes.

The CHAIRMAN. Who are they?

Mr. GAHAGAN. We have about five or six of them.

The CHAIRMAN. Can you name them?

Mr. GAHAGAN. The Cooper-Wilford Co., the United Alloys Co., the Brush Beryllium Co., a company in California. There have been about 15 or 20 beryllium companies.

The CHAIRMAN. Have they done the same sort of research you have carried out?

Mr. GAHAGAN. Not that I know of. I would have been delighted if they had.

PATENT CONTROL IN THE INDUSTRY

The CHAIRMAN. Is there any difference in the patent control of the various companies?

Mr. GAHAGAN. Well, as far as I know, the bulk of the patents that we own—there may be a few outside patents of small value. To all intents and purposes, all the money and the patents are in—

The CHAIRMAN (interposing). How essential to the development of beryllium in the commercial field are these patents, the bulk of which you own?

Mr. GAHAGAN. Well, I can only say that I never think about that; I have never thought about that myself; I think in the last analysis

the greatest protection to your business is producing a better product, cheaper, and giving better service to your customers.

The CHAIRMAN. Now, you really don't mean that you have never given any thought to patents?

Mr. GAHAGAN. You said how essential are they to your control.

The CHAIRMAN. That is right. Now, you have gone to a great deal of trouble to secure patents and you have entered into an agreement with this big German company, dividing the earth between you on the basis of patent control; isn't that correct?

Mr. GAHAGAN. Yes, sir.

The CHAIRMAN. So I say how important are these patents the bulk of which you control, to the development of this industry.

Mr. GAHAGAN. They have been of no importance at all, up to date, because we have up to date never charged one 5-cent piece to anyone for any patent.

The CHAIRMAN. Well, they do protect you a little bit, don't they?

Mr. GAHAGAN. They will when we get them finally to the Supreme Court.

The CHAIRMAN. They haven't been definitely proven yet?

Mr. GAHAGAN. No.

The CHAIRMAN. Are these other companies of which you speak using these patents that belong to you?

Mr. GAHAGAN. Yes, sir; and are proven.

The CHAIRMAN. Under license from you?

Mr. GAHAGAN. We haven't charged a royalty for the patents themselves because I didn't want to create a sales resistance. Nobody likes to buy material and then have to pay you for using it.

The CHAIRMAN. Have you declined to license any applicant?

Mr. GAHAGAN. No, sir; I haven't.

The CHAIRMAN. So that there is practically free use of these patents?

Mr. GAHAGAN. There can be.

The CHAIRMAN. Well, is there?

Mr. GAHAGAN. There has been up to date, but we are not going to continue it, not free use; no. Our customers, in other words, we have taken this attitude with them. Instead of charging them a royalty for heat treating beryllium-copper or charging them a royalty for using beryllium-copper for specified purposes, these patents of ours, patents that we have taken over from Germans, we have told them, you go ahead, and as long as they were customers of ours why we haven't thought of charging them anything at all.

The CHAIRMAN. Please don't think there is anything hostile in these questions.

Mr. GAHAGAN. I am not; you are trying to find out what the facts are.

The CHAIRMAN. That is all. A patent is an exclusive right?

Mr. GAHAGAN. Yes, sir; a patent is a monopoly.

The CHAIRMAN. I am trying to find out if you are using them as an exclusive right.

Mr. GAHAGAN. It is if you enforce it.

The CHAIRMAN. Do you wish the committee to understand the Beryllium Corporation is not enforcing its patent rights?

Mr. GAHAGAN. We haven't tried to yet.

The CHAIRMAN. But you intend to?

Mr. GAHAGAN. Yes, sir.

The CHAIRMAN. And if and when you do enforce those patent rights, you will have practically complete control of the industry, is that correct?

Mr. GAHAGAN. That is what I hope to have.

The CHAIRMAN. And these competitors could not compete with you unless they had a license from you, assuming that the courts uphold the facts?

Mr. GAHAGAN. That is right.

Mr. Cox. I think I should caution the Chairman that some of the other witnesses will not agree with all Mr. Gahagan testifies to.

The CHAIRMAN. I would rather suspect that might be correct. When did you begin this work, Mr. Gahagan?

Mr. GAHAGAN. 1929.

The CHAIRMAN. 1929?

Mr. GAHAGAN. 1929.

The CHAIRMAN. And when was the corporation organized?

Mr. GAHAGAN. 1929.

The CHAIRMAN. When did these competitors come into the field?

Mr. GAHAGAN. Oh, we have them every 6 months.

The CHAIRMAN. You mean there is a new one coming in every 6 months?

Mr. GAHAGAN. Just about. You see that is true in any business, and particularly in a new industry, and I have always taken the position, sir, I want to explain our position; we have attempted to cooperate with anyone who is seriously interested in this beryllium business. It was that desire to cooperate that finally led to an agreement with the Siemens Co.

The CHAIRMAN. What was the term of that agreement with the Siemens Co.?

Mr. GAHAGAN. We have just gone over it.

The CHAIRMAN. I didn't say the terms.

Mr. GAHAGAN. Ten years and continue unless canceled.

The CHAIRMAN. How many of your patents are free of German ownership or interest, except by virtue of this contract?

Mr. GAHAGAN. About 50 percent of our patents.

The CHAIRMAN. Are patents that you have yourself developed?

Mr. GAHAGAN. I should say I estimate that; we haven't looked it up.

The CHAIRMAN. But under this contract all available to the German company?

Mr. GAHAGAN. Yes.

The CHAIRMAN. What is the relative importance of the two patents, the patents owned originally by the German company and your patents?

Mr. GAHAGAN. I would think the German's are more important.

The CHAIRMAN. If the German company wish to exercise its control over those patents, it would be pretty difficult for your company?

Mr. GAHAGAN. They have given us an exclusive right with the right to sublicense at will. They have no control over their German patents in the United States or Canada. They have signed away that control.

The CHAIRMAN. For 10 years?

Mr. GAHAGAN. Yes, sir.

The CHAIRMAN. Now of course contracts can be denounced?

Mr. GAHAGAN. Certainly.

The CHAIRMAN. But theoretically at least, so far as those German patent rights go, they are superior to any right that you have?

Mr. GAHAGAN. That is right.

The CHAIRMAN. They could be taken away from you, and if the German could undertake to enforce those rights, you would be in the same position toward the German company that competitors under your patents would be toward you here?

Mr. GAHAGAN. You mean if they broke the contract and then—

The CHAIRMAN. Or the contract expired, they refused to renew.

Mr. GAHAGAN. That is perfectly true.

The CHAIRMAN. Do you have any subsidiaries?

Mr. GAHAGAN. One. The wholly owned subsidiary is the Beryllium Corporation of Pennsylvania.

The CHAIRMAN. What is the function of that?

Mr. GAHAGAN. That operates a plant in Pennsylvania, at Reading, Pa.

The CHAIRMAN. Are there any other questions?

Mr. JANSSEN. I would like to ask a question, if I might, Mr. Chairman. Mr. Gahagan, what would you say was the average content of metallic beryllium in the thousand tons of ore which you have purchased?

Mr. GAHAGAN. Beryllium runs about, call it about 4 percent.

Mr. JANSSEN. Four percent metallic; that would be roughly about 11 percent?

Mr. GAHAGAN. Runs around 11 percent or 12.

Mr. JANSSEN. I was rather interested in a statement that you made to the effect you knew of two massive deposits, and I am interested in the statement because of the statement you made this morning, the peculiar formation of the beryllium ore in the pegmatites would hardly be in the sense of being massive?

Mr. GAHAGAN. I didn't mean by massive, occupying 10 square miles, or anything, but looked like a substantial quantity in one location.

Mr. JANSSEN. Would it be in order to ask in what section of the country those are located?

Mr. GAHAGAN. They are in the United States. May I answer that question that way? We have spent quite a little money on the development of it up to date.

Dr. LUBIN. Mr. Gahagan, I wonder if you would be willing to elaborate on the exact function of those patents that you have developed yourself and those that you have gotten from Siemens-Halske. In other words, are those patents on processes of using beryllium with other metals, or are they patents on the use of the metal after you have made it and sold it?

Mr. GAHAGAN. They cover a wide range of things. There are some patents that are not so important on various methods of ore break-down; by ore break-down I mean taking the ore and getting the beryllium oxide. We have one or two of those that are quite important. We have some process patents that are quite important on producing beryllium metals, and producing beryllium alloys directly, themselves. Then there are a number of alloy patents; some on beryllium-copper

combinations. No patent on beryllium-copper of itself, but on certain additions to beryllium-copper. On beryllium-nickel and certain additions to beryllium-nickel, alloys, some patents on beryllium iron; beryllium gold and silver. Then there are patents on heat treatment which is the most important thing, because after all the great value of beryllium additions to copper or to nickel or to various other metals is the fact that small amounts can be used and produce remarkable results by heat treatment. The technical reason for that I won't go into, unless the committee wants me to.

And then they discovered that new and unusual results could be obtained by using these alloys for specific purposes and some patents exist. We have exclusive license, in some cases own patents ourselves, on the use of beryllium alloys for specific uses, such as electrical contacts, parts subject to wear, frictional purposes, and so forth. A patent for example of this [pointing to an article on the table] on the use of beryllium-copper for bakelite dies, at the present time, or up to now, bakelite dies have always been made out of steel. Only one toolmaker can work a steel die; it takes him considerable time and it is quite expensive. You can cast beryllium-copper and then harden it by heat treatment and make a beryllium-copper die in some instances for \$50 or \$100 that might cost \$3,000 or \$5,000 if made out of steel. We have a patent on that. The patents cover a wide range of uses and the sad part about all this is that you have to first of all work on how to get beryllium out of ores; then how to get beryllium into various alloys, what percentages, and then what those alloys can be used for. And we have made thousands of melts of different percentages.

Dr. LUBIN. In other words, your patents are two types?

Mr. GAHAGAN. Process patents and heat treatment patents and use patents.

Dr. LUBIN. When you say you permit your competitors to use your patents without charging—

Mr. GAHAGAN. We haven't said that, sir. Up until recently we have not had any patents. We started out in this business by going to various copper fabricators as soon as we found out that small additions of beryllium we added to copper would produce remarkable results, and even before we knew that the Germans were doing the same thing. We naturally thought we were going to get patents on the heat treatment and on those uses. We went to various copper fabricators and got them interested in it, buying beryllium from us, and following the procedure that we had set up, and they collaborated with us and checked our results; and then afterward, when I took over the Siemens patents, we have always told our customers that we would permit their use of these patents for heat treatment or for certain definite uses, and the situation of competition has only recently arisen, and we have been studying as to just what we will do about that.

Dr. LUBIN. But this way you haven't thus far charged your competitors for the use of those processes, similar to those on which you have patents?

Mr. GAHAGAN. As far as I know, they haven't, except in one or two instances, used ours, or just recently came to our notice. For example, that we have competitors who are heat-treating beryllium-copper.

MR. HENDERSON. I think the witness meant they have not charged their customers to whom they sold, and not their competitors making beryllium alloys.

DR. LUBIN. When you talk about your customers, you talk about the people to whom you sell the oxide?

MR. GAHAGAN. The high percent of beryllium.

DR. LUBIN. But they make the metals themselves; they have their own furnaces?

MR. GAHAGAN. No; they make the alloy. This, for example, is beryllium-copper master alloy. That contains about 4-percent beryllium. Now we sell that, and the person we sell that to adds more copper to that and ends up with an alloy of 2 percent, and then he sells that to make it into wire, strip, or rod, or what not, and then sells that to, say, the General Electric Co. or someone, and then they make up the spring and heat-treat it, and so forth.

DR. LUBIN. In other words, when you say you permit your customers to use your patents, what you are saying in effect is that if they buy this material from you, the uses to which they may put it might be stopped by patents, but you will permit them to use it for various purposes without paying you a royalty?

MR. GAHAGAN. That is right. That is what we have done up to date.

DR. LUBIN. So it is not merely a question of patents on your own processes, but it is primarily a question of patents on the uses to which the metals can be put?

MR. GAHAGAN. That is right.

MR. JANSSEN. Mr. Gahagan, for the purposes of the record, and general edification, so that the impression be not gained that the total available metallic beryllium in the ore is in the East, would you care to tell what percent of recovery—in other words, during the 10-year period you purchased 1,000 tons of ore averaging about 4 percent metallic beryllium, that would be 80,000 pounds of beryllium, over a 10-year period. Now of course you didn't realize 80,000 pounds?

MR. GAHAGAN. No.

MR. JANSSEN. I think it would be interesting to note what return you were able to get as commercial beryllium from those potential 80,000 pounds of metallic beryllium in the thousand tons of ores.

MR. GAHAGAN. I would be delighted to give you that figure if I had it. There is a record over 10 years. I haven't it with me.

MR. JANSSEN. In other words, it isn't 100 percent recovery?

MR. GAHAGAN. Oh, goodness, no; that would be fine if it were. Normally—I don't mind stating or telling the committee—normally we have an efficiency in our oxide production—that is, this first stage—of about 80 to 85 percent; in some instances 90; so you can roughly figure that we get about 70 to 75 or 80 percent of the metal out as finished metal, ready to be sold, from the ore.

MR. JANSSEN. After a 10-year period of being in the beryllium business, would you care to indicate about what poundage of metallic beryllium was sold last year?

MR. GAHAGAN. I think I have the figures. Do you mean in this country?

MR. JANSSEN. Yes.

Mr. GAHAGAN. I don't know, sir. I don't know what the competition sold.

Mr. JANSSEN. You would have sold the major portion of it, I take it.

Mr. GAHAGAN. I think so; I don't know.

Mr. JANSSEN. About how much did you sell last year?

Mr. GAHAGAN. About 2,000 pounds, as I remember.

Mr. JANSSEN. Thank you.

Mr. GAHAGAN. I don't know; there is much more sold in Europe.

Representative REECE. You have competitors who make the finished product, such as you have exhibited here.

Mr. GAHAGAN. Yes.

Representative REECE. That is, you have competitors who have the facilities for making the finished products?

Mr. GAHAGAN. Not so far as I know.

Representative REECE. It occurred to me that possibly some of us gained the inaccurate impression from your statement a few moments ago that you had several competitors, and I had in mind if these competitors had the facilities for making the finished product such as you are in position to produce in your plant at Reading, or do they only bring it up to a certain stage and then sell it to their customers, who complete the process?

Mr. GAHAGAN. That is right.

Representative REECE. And it is your feeling that in these early stages these competitors to whom you refer are using the patents which you own, or to which you have the right.

Is electric energy one of the material elements of cost in the production of this material?

Mr. GAHAGAN. Yes, sir.

Representative REECE. How much electric energy is required, or would be required, to produce a thousand pounds?

Mr. GAHAGAN. You mean all the way through the fabrication and everything?

Representative REECE. That's right.

Mr. GAHAGAN. Ten thousand pounds, did you say?

Representative REECE. No; 1,000 pounds.

Mr. GAHAGAN. About 30,000 kilowatts, I should say.

Ten thousand pounds would be 300,000 kilowatts; that is, from the beginning to the finished metal in rod form or wire or what not.

Representative REECE. If this country gets a large-scale production, then a large amount of electric energy is going to be required.

Mr. GAHAGAN. Yes, sir.

Representative REECE. It is your feeling, as I understood from your testimony this morning, from the explorations which you and your men have made, that there are quantities of beryl and ore in the Tennessee Valley.

Mr. GAHAGAN. I think there is. There is some indication of it.

Representative REECE. Then, if we can get those two elements¹ harnessed together, we could do a pretty big work down there, couldn't we?

Mr. GAHAGAN. Well, it would take something about like that to get where they are abroad.

¹ Representative Reece refers to Tennessee Valley Authority's production of electric power.

Representative REECE. I was necessarily absent during part of your testimony, but it was my understanding from what I heard this morning that you felt substantial quantities of beryllium alloy were being produced abroad—that is, in Germany—at this time.

Mr. GAHAGAN. I am sure of it.

Representative REECE. How many bushings for airplanes did you say had been manufactured over there, according to your information?

Mr. GAHAGAN. Well, up until about 2 years ago, 15,000.

Representative REECE. And since that time you don't have any information?

Mr. GAHAGAN. I don't know. That is the last information—a year ago last January.

Representative REECE. Do you have any information about the efficiency of those bushings?

Mr. GAHAGAN. So far as I know, none had ever failed in service. Some of them had had 12,000 hours.

Representative REECE. That would indicate, then, that most of them had had service?

Mr. GAHAGAN. Yes.

Representative REECE. Do you know; have any bushings been manufactured, or other parts been manufactured, for airplanes over here?

Mr. GAHAGAN. Yes.

Representative REECE. In what quantity?

Mr. GAHAGAN. I don't know, but nothing like that, nothing compared to the German manufacture.

Representative REECE. As I came in you were discussing the situation in England, and referring to conversations which you had had with representatives of the English concerns or English Government. How did you get contact with the English Government, or those representatives of the Government, in England?

Mr. GAHAGAN. I didn't get in contact with them at all. They got in contact with me.

Representative REECE. They sent for you?

Mr. GAHAGAN. Yes, sir; they sent for me.

Representative REECE. Who was the one who sent for you to come? You may have stated this.

Mr. GAHAGAN. Mr. Jamieson.

Representative REECE. Chairman for the Vickers Co.?

Mr. GAHAGAN. Yes.

Representative REECE. He was manifesting a great deal of interest in view of the position he occupied, and I am just wondering—have any officials over here who have responsibility for defense matters shown the same interest?

Mr. GAHAGAN. Yes; recently. Recently they have; yes.

Representative REECE. Of course, as you stated this morning, there is a great and difficult problem encountered in developing a new industry of this kind, which possibly accounts for the slowness with which advance has been made here, but would not the industry in Germany and the Government in Germany have encountered the same obstacles and problems which we would encounter here?

Mr. GAHAGAN. Yes; they have, but they have had available tremendous sums to work with. As I said this morning, the main problem with beryllium alloys, the beryllium business, is not in pro-

ducing beryllium at all; it is in producing beryllium alloys and fabricating it properly. They have the advantage that they have millions of dollars' worth of equipment, of a specialized type, all the way from vacuum furnaces to special rolling equipment, special wire-rolling equipment development for other difficult alloys which they used for beryllium—the beryllium alloys, rather.

Representative REECE. I don't want to ask any question, Mr. Cox, that might encroach upon the program which you expected to develop, but I am interested in this phase of the problem. It would appear to me that if beryllium has the possibilities of wide use that the testimony of Mr. Gahagan has indicated that it might have, the introduction of beryllium widely in the industry will probably mean a replacement of a great many of the facilities of certain industrial concerns in order to accommodate themselves to the application of this new industry. It would seem important to me to know if industry has hesitated to encourage the development of the beryllium, fearing that it might mean a replacement of some of its own facilities in doing so. If you haven't developed that, I am just wondering if you expect to go into that phase.

Mr. Cox. We expect tomorrow, through Mr. Gahagan and some other witnesses, to develop some of those difficulties which have been encountered in the development of the production of beryllium in this country.

Representative REECE. I will not ask for an answer to the problem, which I had in mind but that had occurred to me as being probably a very important phase of the study.

Mr. Cox. We intend to have some evidence about that.

Mr. JANSSEN. When people hear for the first time of a new material, such as beryllium, they get the idea it must be heaven-sent, and oftentimes they get some erroneous impressions. I notice even in our preamble we say it contributes to qualities of hardness, lightness, and strength. Of course, that is true with certain limitations. In other words, 2-percent beryllium in copper wouldn't contribute to the lightness. It should have been "hardness, strength, and increased elastic limit," in all probability.

Mr. GAHAGAN. And increased fatigue resistance.

Mr. JANSSEN. And by the same token, the use of beryllium augments certain existing properties in alloys per se. Oftentimes it becomes necessary to add another alloy to augment the value of beryllium. In other words, we haven't spoken very much about the use of beryllium in iron, but, as I recall it, from my academic recollection, the values of the use of beryllium in iron are augmented by the use of nickel.

Mr. GAHAGAN. That is right. The chief value of beryllium in iron is that it oxidizes and desulfurizes.

Mr. JANSSEN. The values of strength, resistance to fatigue, and elastic limits and hardness are made possible not by beryllium alone but by the addition of nickel and chrome.

Mr. GAHAGAN. Yes; beryllium of itself is of no particular value, except X-ray windows, and I don't know many of those being used.

Mr. HENDERSON. As I gather from your testimony, you had no knowledge that Vickers or any of the big organizations that are interested in munitions had a part ownership in your company.

Mr. GAHAGAN. No, sir.

Mr. HENDERSON. You had no public sale of your securities.

Mr. GAHAGAN. No, sir.

Mr. HENDERSON. Had somebody bought it and put it in their name?

Mr. GAHAGAN. That is right.

Mr. HENDERSON. I don't want to pry into your affairs too closely.

Mr. GAHAGAN. That is all right, sir.

VICKERS CO., IN ENGLAND, UNDISCLOSED PRINCIPAL IN STOCK PURCHASE

Mr. HENDERSON. But just what kind of an agency or a person did buy those securities for Vickers?

Mr. GAHAGAN. It was one of my directors, Mr. Bassett. He was a partner of James B. Colgate & Co., and he is in England every year on business.

Mr. HENDERSON. Then it was bought in a house name?

Mr. GAHAGAN. Yes; he bought it personally for this house, and I thought he was buying it for himself, as a matter of fact.

Mr. HENDERSON. And so when you called on Mr. Jamieson, you had no knowledge of what that specific interest was?

Mr. GAHAGAN. Yes; Mr. Bassett, just before I sailed, told me, "Well, you have an English stockholder."

I said, "Have I?"

And he said, "Yes; that stock which I hold down here is really for the account of Mr. Jamieson."

I said, "Who is he?"

He said, "Good Lord, he is chairman of the board of the Vickers Co.; don't you know him?"

I said, "No."

He said, "I am giving you a letter to him, and he wants you to see him as soon as you get in England."

So I called on him.

Mr. HENDERSON. Then he told you directly that your contract was going to be modified?

Mr. GAHAGAN. Yes; he told me that.

Mr. HENDERSON. He didn't tell you how?

Mr. GAHAGAN. No, sir; he said he would take care of it.

Mr. HENDERSON. When you were on your visit to Germany with Dr. Rohn and these others, two unofficial representatives of the—

Mr. GAHAGAN. British Government; yes.

Mr. HENDERSON. Of the British Government called on you?

Mr. GAHAGAN. Called on Dr. Rohn at Hanau while I was in Hanau with Dr. Rohn.

Mr. HENDERSON. And they, after a few days of arguing back and forth, I believe you said, succeeded in convincing Dr. Rohn and the other representatives of the Siemens & Halske that your contract should be modified in the interest of England.

Mr. GAHAGAN. That is right.

Mr. HENDERSON. And we have already been over—the chairman has—the relationship between the German Government and important concerns like Siemens & Halske. You said yourself, I believe, that no important contract is signed by an organization like that without some preview or notice by the German Government.

Mr. GAHAGAN. That is right.

Mr. HENDERSON. So in effect, in that particular essential matter, the English Government and the German Government were really meeting through their industrial representatives.

Mr. GAHAGAN. Yes; and although Dr. Rohn didn't tell me, I know that the modification that he made in the contract must have had the approval of the German Government. As a matter of fact, I do know it did have the approval.

Mr. HENDERSON. It probably came about, however, didn't it—I don't believe you covered this—through some arrangement which Vickers has with Siemens & Halske covering the exchange of ideas?

Mr. GAHAGAN. No. I don't know what interest they have.

Mr. HENDERSON. You don't know that they do have international relations of that kind?

Mr. GAHAGAN. Between Vickers and Siemens?

Mr. HENDERSON. Yes.

Mr. GAHAGAN. I don't know. I wouldn't be surprised though, because Siemens are in a great many businesses, but I don't know of any particular tie-up between the two.

Mr. HENDERSON. Did you have a guess as to what would seemingly induce a modification of your contract contrary to the German interests and certainly contrary to Siemens & Halske's reservation in their territory?

Mr. GAHAGAN. As a matter of fact, they told Dr. Rohn if they didn't modify it, the English Government had the authority to take up their patents and ours, too, and set up somebody in the beryllium business in England. In questioning me about this, your Mr. Borkin said that he thought that was some act of 1892,¹ or something like that; he seemed to know what the act was.² I didn't know.

Mr. HENDERSON. It certainly seems to me, Mr. Chairman, that he got into a series of things that out-Oppenheimed Oppenheim in reality, and this whole question of international agreements and understandings ought to be gone into.

PATENT CONTROL OVER BERYLLIUM PROCESSING MACHINES

Dr. LUBIN. Mr. Gahagan, a minute ago in discussing the question of your patents and the fact that you control the uses to which these materials may be put by any purchaser from you, you also mentioned the fact that certain type machines are necessary for processing these materials.

Mr. GAHAGAN. That is right.

Dr. LUBIN. Do you have patents on those machines?

¹ The Patents, Designs, and Trade Marks Act, 1883 (46 and 47 Vict., c. 57) provides, in part: "the officers or authorities administering any department of the service of the crown may use the invention for the services of the crown on terms to be agreed on before or after the use thereof." And "The inventor of any improvement in instruments or munitions of war may (either for or without valuable consideration) assign to her majesty's principal secretary of state for the war department all the benefit of the invention and of any patent obtained or to be obtained for the same."

The Patents and Designs Act, 1907 (7 Edw. 7, c. 29), states, in part: "Any person interested may present a petition to the Board of Trade alleging that the reasonable requirements of the public with respect to a patented invention have not been satisfied, and praying for the grant of a compulsory license or, in the alternative, for the revocation of the patent."

For a discussion of the English Statute of Monopolies, see testimony of Lawrence Langner, a witness before the committee. Hearings, Part III, p. 1022 et seq.

² See testimony in this connection on pp. 2043-2044, supra.

Mr. GAHAGAN. Yes.

Dr. LUBIN. In other words, then, not only is it necessary for a purchaser of your raw material to get permission from you to use that material to make certain specific things with, but also the very process of manufacture is controlled by you in the sense that you have patents on the machines they must use in order to make the product.

Mr. GAHAGAN. That is right.

Dr. LUBIN. There is one further thing that interests me, namely, the question of using beryllium metals in the making of dies. Is it possible with beryllium metal to make, say, bearings for automobiles without having to go through the machining process that is now necessary?

Mr. GAHAGAN. No; you see a bearing is something that must be accurate to a thousandth of an inch, in some instances closer tolerance than that.

Dr. LUBIN. You can't get such tolerances?

Mr. GAHAGAN. Usually you have to have some reaming on any bearing. Those are not expensive operations, though.

Mr. COX. I hate to interrupt this, but I have two witnesses I have agreed to release this afternoon that I have to put on before we adjourn.

The CHAIRMAN. Very well, we will hold our questions.

Mr. COX. Mr. Gahagan will be back. The next witness is Dr. Hensel.

The CHAIRMAN. Do you solemnly swear that the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. HENSEL. I do.

Mr. COX. Mr. Wilson is going to examine the witness.

**TESTIMONY OF FRANK ROBERT HENSEL, CHIEF METALLURGIST,
P. R. MALLORY, CO., INDIANAPOLIS, IND.**

Mr. WILSON. Will you give your name and address to the reporter.

Mr. HENSEL. Frank Robert Hensel, 4727 North Capitol, Indianapolis, Ind.

Mr. WILSON. What company are you with?

Mr. HENSEL. I am with the P. R. Mallory Co. of Indianapolis.

Mr. WILSON. And what business is the P. R. Mallory Co. in?

Mr. HENSEL. The P. R. Mallory Co. is in the radio-control business and in special metallurgical products.

Mr. WILSON. There is also a company in England, is there not, known as the Mallory Metallurgical Products?

Mr. HENSEL. Yes.

Mr. WILSON. What relation does the Mallory Metallurgical Products Co. bear to the Mallory Co. in Indianapolis?

Mr. HENSEL. We organized the Mallory Metallurgical Products, Ltd., about a year ago, because we had formerly exported our materials to England, and we felt there was some need for a local source of supply. Therefore, we organized M. M. P., with the majority of stock being held by British interests.

Mr. WILSON. What is your position with P. R. Mallory Co.?

Mr. HENSEL. I am consulting engineer.

Mr. WILSON. Your work is principally as a metallurgist?

Mr. HENSEL. Yes; chief metallurgist.

Mr. WILSON. When did the P. R. Mallory Co. first become interested in beryllium and beryllium alloys?

Mr. HENSEL. We became interested in approximately 1935.

Mr. WILSON. What steps did you take in the way of investigating the possibilities of beryllium and the source of supply of the alloy?

DEVELOPMENT FOR ELECTRODES PRINCIPAL INTEREST OF MALLORY CO. IN
BERYLLIUM

Mr. HENSEL. Well, we became interested in beryllium because we are using copper alloys for electrode dies and castings used in electric welding machinery, and we are primarily interested in materials which combine a high thermal or electrical conductivity with great strength. Since beryllium seemed to offer considerable possibilities we went to investigate primarily the copper-beryllium situation.

Mr. WILSON. Your principal use of beryllium, then, as I understand it, would be for electrodes?

Mr. HENSEL. It is for electrodes and for castings that are used in resistance welding machinery and electric machinery in general.

Mr. WILSON. When you first investigated the field, what source of supply did you contact?

Mr. HENSEL. We contacted only the Beryllium Corporation of Pennsylvania, or America.

Mr. WILSON. When was your first contact with that company?

Mr. HENSEL. I imagine it must have been late in 1935 or early in 1936, I can't remember exactly.

Mr. WILSON. Your discussions with Beryllium Corporation over supplies and the possibility of the material, I take it, continued from that time up until some time in 1937?

Mr. HENSEL. That is right. I mean it continued until now for that matter.

Mr. WILSON. At the time of the original discussion, can you relate to the committee just in a general way the nature of those discussions and what your interest was?

Mr. HENSEL. Well, we were not so much interested in the binary alloy containing about 2 percent beryllium and balanced copper or $2\frac{1}{4}$ percent beryllium, because this material has 20 to 25 percent of the conductivity of copper. We were more interested in alloys which had not quite the same strength but had a much higher conductivity, and at that time work had been done by the General Electric Co. on an alloy containing cobalt and beryllium, and this was the alloy that we were primarily interested in. As a matter of fact, before we started this work, we had worked with the copper cobalt alloys in general and had added silicon as a hardening element forming cobalt silicide. And then it was more or less a natural conclusion to substitute beryllium for the silicon in approximately the same ratio which is about four to six times the amount of cobalt as the amount of beryllium. As a matter of fact, the actual percentages are approximately half a percent of beryllium

and 2½ percent of cobalt. Now, this alloy gives approximately 50 percent electrical conductivity; in certain cases you can go up as high as 55 or 65 and it gives tensile strength in the neighborhood of 1,000 pounds per square inch. We actually took out a patent which combines both the cobalt silicide with the addition of beryllium because we found that by using the cobalt silicide we could get away with a smaller percentage of beryllium and, therefore, saving a certain amount of money because beryllium was the most expensive element in that alloy.

Mr. WILSON. At the time that you first entered into negotiations with Mr. Gahagan and the Beryllium Corporation, they were producing, were they not, the binary alloy?

Mr. HENSEL. They produced the binary alloy which is added as a 4 percent master alloy to produce this ternary or quaternary alloy in which we were primarily interested.

Mr. WILSON. Were there any other producers of beryllium alloy in the field at the time you started your negotiations with Mr. Gahagan?

Mr. HENSEL. We were approached by several, but I think that was later. I don't recall the date, but we were approached by the Brush Beryllium Corporation and by United and Cooper, asking us to consider them as a source of supply.

Mr. WILSON. Did you know the existence of these companies at the time you first commenced negotiations with Mr. Gahagan?

Mr. HENSEL. I don't think so.

Mr. WILSON. I note that there were three conferences, I believe, between Mr. Mallory and Mr. Gahagan and various members of the Mallory firm in the first half of 1937. Can you tell me in general what the nature of the negotiations was between the Mallory Co. and the Beryllium Corporation at that time?

Mr. HENSEL. Well, we tried to promote a closer cooperation between the two companies and particularly tried to develop the use of beryllium-bearing alloys for the special field in which we were interested which was only a limited field, that is welding electrodes. And then also in these conferences the patent situation was discussed, particularly with reference to some patents which were held, I think, by the Electro Metallurgical Corporation.

Mr. WILSON. And were those patents that are controlled by the Beryllium Corporation?

Mr. HENSEL. No; these patents are not controlled by the Beryllium Corporation.

Mr. WILSON. Well now, in connection with those negotiations, was there any discussion of the possibility of the Mallory Co. obtaining any exclusive rights under the patents held by the Beryllium Corporation?

Mr. HENSEL. We tried to cover the field of welding electrodes to get the exclusive rights on welding electrodes. I mean we discussed it. We didn't go into any further details.

Mr. WILSON. And those negotiations, in other words, were directed to the possibility of the Mallory Co. becoming the exclusive licensee for the purpose of manufacturing welding electrodes?

Mr. HENSEL. That's right.

Mr. WILSON. And in return for that, or rather, on the other side of the negotiations, was it suggested that the Mallory Co. would secure all of its supplies of the alloy from the Beryllium Corporation?

Mr. HENSEL. That's right; yes.

Mr. WILSON. But those negotiations, at least by July 1937 had not culminated in any formal agreement?

Mr. HENSEL. No.

Mr. WILSON. Well, now, at that time was there any question as to the possibility of the Mallory Metallurgical Products Co. of England going into the beryllium business?

Mr. HENSEL. Yes; as a matter of fact, we were very much interested to have our English company carry the same lines we did here in the United States.

Mr. WILSON. But they were not handling the material at that time?

Mr. HENSEL. No; you see, the company was started only late in 1937.

Mr. WILSON. When you first began to consider the possibility of the Mallory Metallurgical Products Co. taking over a line of beryllium products, did you find any obstacle in the way in England?

Mr. HENSEL. In England we had to get in touch with Dr. Rohn, because the English patents were controlled by the Heraeus Vacuumsmelze, so I went over to see him.

Mr. WILSON. About when did you make that trip?

Mr. HENSEL. That was, I think, in November 1937.

Mr. WILSON. And at that time I believe you had a conference with Dr. Rohn at Hanau?

Mr. HENSEL. That's right.

Mr. WILSON. The principal subject of discussion being at that time the possibility of the Mallory Metallurgical Products in England obtaining rights under the Siemens & Halske patents in England?

Mr. HENSEL. That is right—for the restricted field of welding electrodes.

Mr. WILSON. Can you relate briefly for the committee the general discussion that took place at that time with Dr. Rohn?

Mr. HENSEL. Well, Dr. Rohn at that time suggested that the master alloy should be purchased from Germany and that also the fabricated rod had to be imported from Germany, but that the agreement that we would make in England would be subject to the approval of the Beryllium Corporation of America.

ARRANGEMENT WITH BERYLLIUM CORPORATION NECESSARY TO COMPLETE NEGOTIATIONS ABROAD

Mr. WILSON. In those negotiations was there any question of the purchases by the P. R. Mallory Co. in this country?

Mr. HENSEL. Well, when I said they were subject to the approval of the Beryllium Corporation that was more or less understood. We made an arrangement here with the Beryllium Corporation recognizing the patents and purchasing the raw materials from the Beryllium Co.

Mr. WILSON. In other words, before any agreement could be reached with Siemens & Halske as to the English situation, it was first

necessary that you conclude an agreement with the Beryllium Corporation of America for exclusive purchase from Beryllium Corporation of all of your supplies in this country?

Mr. HENSEL. I think that is fundamentally correct.

Mr. WILSON. Well, now, after you returned to this country did you continue your negotiations with the Beryllium Corporation as to an agreement such as was outlined a moment ago for the exclusive purchase of raw material from Beryllium Corporation and for an exclusive license in the electrode field?

Mr. HENSEL. Well, we were willing to sign a requirements contract, which means, in other words, the same thing.

Mr. WILSON. Well, now, during this period and up until the time of the negotiations with Dr. Rohn, as I understand it all of your requirements of beryllium in this country had been purchased through the Beryllium Corporation.

Mr. HENSEL. Yes; of course, I mean our situation is a little bit peculiar in that respect, because we buy the master alloy from the Beryllium Corporation, but we buy the finished product from the Beryllium Corporation, the American Brass Co., and from Riverside; so far as we were concerned, as users of the master alloy, that was definitely purchased from the Beryllium Corporation. So far as the other supplies were concerned, we had no control.

Mr. WILSON. Well, now, subsequent to your trip to Hanau, these negotiations continued with Mr. Gahagan's company, as I understand it, for some time, and at least by late in the summer of 1938 they had not culminated in any agreement.

Mr. HENSEL. That is right.

Mr. WILSON. At that time were you again approached by representatives of Siemens & Halske? Was there a further conference with the representatives of Siemens & Halske?

Mr. HENSEL. Dr. Rohn was over in this country with Mr. Giller, of England, and they visited us at Indianapolis to discuss the situation.

Mr. WILSON. And the subject of that discussion was the same as the discussion you had at Hanau, namely, the possibility of working out an agreement with Mr. Gahagan?

Mr. HENSEL. Yes; we agreed that, everything equal, if the price would be competitive and so on, we would agree to purchase from the Beryllium Corporation.

The CHAIRMAN. Was this Mr. Giller the same gentleman who carried out the prophecy that Mr. Jamieson made to Mr. Gahagan when Mr. Gahagan was going abroad?

Mr. HENSEL. That I don't know, but I assume so.

Mr. WILSON. Mr. Giller appeared as a representative of English interests?

Mr. HENSEL. Yes; that is, I understand Mr. Giller was taking care of that situation.

The CHAIRMAN. When you say English interests, what do you mean?

Mr. HENSEL. Of Dr. Rohn's interests, not ours.

The CHAIRMAN. You talked with him?

Mr. HENSEL. I talked with Mr. Giller; yes.

The CHAIRMAN. Did you get the impression that he was representing the British Government?

Mr. HENSEL. Well, I think I talked with him before that time. You see, I was there late in 1937.

The CHAIRMAN. Did you at any time get the impression that he was representing the British Government?

Mr. HENSEL. No; I didn't.

Mr. WILSON. I take it, then, at the time of the conference with Dr. Rohn and Mr. Giller in this country in September of 1938 a substantial agreement was reached between the Mallory Co. and Dr. Rohn and Mr. Giller?

Mr. HENSEL. I would say an understanding, but not an agreement.

Mr. WILSON. However, it did get to the place where the Mallory Co. agreed that Mr. Gahagan, with Dr. Rohn and Mr. Giller, were to get up a memorandum of what was agreed on at the meeting, and present it for signature.

Mr. HENSEL. I don't know that that ever was done.

Mr. WILSON. And the substance of what was agreed on was that the Mallory Co. would first purchase all of its requirements from the Beryllium Corporation on a competitive basis?

Mr. HENSEL. On a competitive basis. That is right.

Mr. WILSON. And that it would favor the Beryllium Co. with all orders possible for any form of the alloy.

Mr. HENDERSON. Can we ask a question there? What do you mean, on a competitive basis?

Mr. HENSEL. Well if, for instance, the price of beryllium would be very much out of line between that offered by a competitor of Beryllium Corporation, we would at least have a chance of considering getting quotations from the competitor.

Mr. HENDERSON. No further than just considering quotations?

Mr. HENSEL. Well, that was—I don't know; I mean we were trying, then, to submit these other prices to the Beryllium Corporation, suggesting to them to meet them.

The CHAIRMAN. But you had no way of enforcing the meeting of these other prices?

Mr. HENSEL. We had no other way than actually placing an order, probably. That would be one way of enforcing it.

The CHAIRMAN. Were you free to place an order with another competing company?

Mr. HENSEL. That, of course, would be connected with the patent structure.

The CHAIRMAN. What is your opinion as to whether or not you were free, as a practical matter?

Mr. HENSEL. Of course, I am not a patent attorney and I don't want to stick my neck out in that respect. I mean, it is—you see, the situation was that some work was done in this country on the investigation of copper beryllium alloys in 1926 by an employee of the Electro Metallurgical Corporation. In other words, the binary system of copper and beryllium was published in, I think, 1926 in the Brass World, and later on, I think, an article was published, also in 1926, if I am correct, in which a heat treatment was described for an alloy containing primarily copper and nickel and beryllium.

The CHAIRMAN. In other words, there might be a dispute as to the validity of a patent?

Mr. HENSEL. That's right.

The CHAIRMAN. But putting that aside, and assuming the patents to be valid, so you wouldn't have to venture a legal opinion, let's assume that the patents are valid. Under that assumption are you of the opinion that you were bound by your contract not to accept the price of a competitor?

Mr. HENSEL. Well, you see the fact that we are not using the binary alloy, but an alloy containing only a small percentage of beryllium and the balance of cobalt, and the proportions are almost the same as the one that was patented prior to the Siemens patent in this country, but had nickel instead of cobalt, that made the question somewhat open to us if an alloy of that nature would not be outside of the scope of the Beryllium Corporation patent.

The CHAIRMAN. But assuming you wanted to buy an alloy covered by the Beryllium patent, then were you at liberty to buy from any other corporation than the Beryllium Corporation?

Mr. HENSEL. No; we would not have bought from anybody else.

The CHAIRMAN. And you believed that you were bound by this agreement or understanding not to buy from anybody else?

Mr. HENSEL. That's right.

Mr. WILSON. Now, there was a third point in that agreement, was there not, Mr. Hensel, to the effect that the P. R. Mallory Co. would endeavor to specify, whenever buying manufactured material from any other company, that the master alloy used for that fabricated material should be purchased from the Beryllium Corporation?

Mr. HENSEL. That is correct.

Mr. WILSON. When you first went into the manufacture of beryllium copper products what price did you pay for the master alloy?

Mr. HENSEL. \$30.

Mr. WILSON. And those purchases were from the Beryllium Corporation?

Mr. HENSEL. Yes.

Mr. WILSON. At what time, approximately, were your first purchases from them?

Mr. HENSEL. I mentioned 1936.

Mr. WILSON. 1936?

Mr. HENSEL. Yes.

Mr. WILSON. And you continued to pay the \$30 price for how long a time, approximately?

Mr. HENSEL. Well, the price reduction came about because Brush Beryllium went on the market with a beryllium price of \$23, which we brought to the attention of the Beryllium Corporation, and the Beryllium Corporation is meeting this price.

Mr. WILSON. How long from the time that Brush Beryllium announced the \$23 price; how long after that did you continue to pay the \$30 price?

Mr. HENSEL. I don't recall. I don't think it was for very long. It might have been several months.

Mr. WILSON. If I suggest that it was about 6 months, would that be about right?

Mr. HENSEL. It might be. I think it wasn't as long as that.

Mr. WILSON. Well now, from the time that you started purchasing at the \$23 price you continued to pay that price up until when?

Mr. HENSEL. Until about 2 weeks ago—2 or 3 weeks ago.

Mr. WILSON. Had there been, prior to that time, an announcement by any competitor of the Beryllium Corporation of a lower price on the master alloy?

Mr. HENSEL. Yes; the Brush Beryllium quoted a materially lower price.

Mr. WILSON. At about what time did that quotation come out?

Mr. HENSEL. Well, I think it probably was about 3 or 4 months ago.

Mr. WILSON. About the first of the year?

Mr. HENSEL. About.

Mr. WILSON. At that time were you still negotiating with Mr. Gahagan and the Beryllium Corporation on the question of the Mallory Co., obtaining an exclusive license in the field of welding electrodes?

Mr. HENSEL. I think these negotiations were rather spotty. We never came to a definite agreement.

Mr. WILSON. When the price announcement was made by Brush Beryllium of \$15 a pound was that brought to Mr. Gahagan's attention?

Mr. HENSEL. Yes; as a matter of fact, the price was not reduced to \$15 first. I think it was reduced to somewhere around \$19, and the actual official reduction to \$15 was made only about 3 weeks ago.

Mr. WILSON. But your company was aware, was it not, that Brush was putting beryllium out at a price of \$15 as early as January 30, 1939?

Mr. HENSEL. Yes; we heard from some of our associate companies.

Mr. WILSON. And was there some suggestion at that time made to Mr. Gahagan that it might be well for him not to reduce the price until you had made arrangements with certain of your customers?

Mr. HENSEL. I think it was suggested—something along that line.

Mr. WILSON. In other words, that it might be well for the Beryllium Corporation to maintain their \$23 announced price, at least until such time as you had had a chance to line up some of your customers on the basis of the \$15 price?

Mr. HENSEL. Yes.

Mr. WILSON. Now, just one more thing in regard to the agreement. I believe you said a moment ago that you were still negotiating with Mr. Gahagan at that time in regard to the exclusive license arrangement, and on February 3, or about that date, was there a further conference with Mr. Gahagan as to the arrangement that should be made between the Beryllium Corporation and the Mallory Co.?

Mr. HENSEL. That must have been in New York. I don't think I was present there.

Mr. WILSON. During this period of time, what had been the relations of Mallory Metallurgical Products Co. and Siemens & Halske in regard to the English situation?

Mr. HENSEL. Well, we did not pursue the matter very forcefully in England. As a matter of fact, we haven't sold any beryllium containing copper in England at all.

Mr. WILSON. But you have been in constant correspondence, have you not, with Dr. Rohn, as to the completion of that arrangement?

Mr. HENSEL. Yes; we had some rearrangement of our English capital in England which necessitated putting the commercial activities somewhat back.

Mr. WILSON. And your principal interests in completing your arrangements with Beryllium Corporation in this country were so that the Mallory Metallurgical Products Co. could put out a line of beryllium products?

Mr. HENSEL. That is right. More or less our policy here was directed by our English interests.

Mr. WILSON. Then, when you answered the chairman a moment ago to the effect that you would probably continue to purchase beryllium from the Beryllium Corporation regardless of your views on the patent situation, it was really based somewhat on your interest in your English company.

Mr. HENSEL. I think that is fundamentally correct.

Mr. WILSON. Have you any idea what would have happened to the English company if you had broken off negotiations with the Beryllium Corporation and started purchasing from competitors?

Mr. HENSEL. Well, I am quite sure our English company wouldn't have been able to sell very profitably. That is just an assumption on my part.

The CHAIRMAN. Do I understand you incorporated the British company because it was impossible for your own company to do business in Great Britain by virtue of this contract which has been put in the record here, which gave the German Siemens Co. the exclusive privilege of selling beryllium in the Old World, or in Europe?

Mr. HENSEL. No; I would say that the part of beryllium copper in the activities of our English company is only a minor part. The major activities were in a different product, which is fundamentally tungsten and copper, or tungsten and silver, called elkonite. That was really the main purpose for the company. We tried to make it the outstanding welding electrode company in England, and therefore for certain applications it would have been necessary to use beryllium copper or beryllium.

The CHAIRMAN. Well, the organization of the company in England had nothing to do with the use of beryllium or beryllium products, did it?

Mr. HENSEL. No.

Mr. WILSON. We have one more witness that we would like to put on today, if the committee is through.

The CHAIRMAN. Are there any questions to be asked by members of the committee of this witness?

Mr. HENDERSON. I would like to ask a question. As I understand the nature of your testimony, you were trying to get an exclusive contract for welding electrodes.

Mr. HENSEL. Yes.

Mr. HENDERSON. Out of the division of the earth which the Siemens & Halske and Beryllium Corporation had made—is that it? You were trying to stake out a product kind of exclusive territory for yourselves?

Mr. HENSEL. That is right.

Mr. HENDERSON. That is all I have.

The CHAIRMAN. Any other questions? Thank you very much, Mr. Hensel.

(The witness was excused.)

Mr. Cox. Dr. Kertess.

The CHAIRMAN. Do you solemnly swear that the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Dr. KERTESS. I do.

TESTIMONY OF DR. FERDINAND A. KERTESS, NEW YORK CORRESPONDENT, DEUTSCHE GOLD UND SILBER-SCHNEIDANSTALT, NEW YORK, N. Y.

Mr. Cox. Will you give the reporter your name and address, and tell him what your occupation is?

Dr. KERTESS. The name is Dr. Ferdinand A. Kertess. I am representing a German Company known as the Deutsche Gold und Silber-Schneideanstalt.

Mr. Cox. Will you object if I refer to that company as Degussa?

Dr. KERTESS. No.

If I may be permitted before I enter into the testimony, I would like to make one statement.

This morning it was put on this record a letter by a German named Engelhardt as to a suspicion on the United States Patent Office and I am very anxious to state here as a representative of a German company which has filed in this country innumerable patents, and is still filing innumerable patents, such suspicion is the personal opinion of one individual and in order to be just to the United States Patent Office, I am very anxious to declare that at no time have we found any slightest trace of discrimination against any German patent application.¹

The CHAIRMAN. Are you associated with the company for which Dr. Engelhardt spoke?

Dr. KERTESS. I am associated with the Degussa company, which has taken over from Siemens & Halske the beryllium interests.

The CHAIRMAN. I understand that, but are you associated with the company of which Dr. Engelhardt is spokesman in any way?

Dr. KERTESS. No; I am not.

Mr. HENDERSON. Did the Degussa have any arrangements with Siemens & Halske?

Dr. KERTESS. Certainly; yes.

Mr. Cox. I think you might save time now if you would just tell us what those arrangements are, so far as they relate to beryllium, Doctor.

The CHAIRMAN. Just a moment, Mr. Cox. I wanted to develop just a little bit more about the particular point to which the witness has directed the attention of the committee. Had you heard of this attitude of Dr. Engelhardt before the testimony was made this morning?

Dr. KERTESS. I never heard of it and it was the first time I ever heard of any suspicion of anyone in this direction.

The CHAIRMAN. Very well.

Mr. Cox. Will you tell us what activities the Degussa carries on in connection with the production of beryllium, Doctor?

¹ "Exhibit No. 477," appendix, p. 2276.

DEGUSSA'S ACQUISITION OF BERYLLIUM INTERESTS

Dr. KERTESS. Degussa being one of the largest metallurgical factors in Europe and the largest in Germany, engaged in the production of a number of metals, precious metals and others, and among them started to become interested in beryllium metal. Siemens & Halske were anxious to dispose of their interest in beryllium metals altogether and consequently sold out their beryllium interests to the Degussa Co., so that the Degussa Co. today is the only producer of beryllium metal in Germany.

Mr. Cox. That beryllium metal is sometimes referred to, perhaps loosely, as pure beryllium, is that right?

Dr. KERTESS. Right.

Mr. Cox. And your company makes this beryllium metal?

And sells it to Siemens & Halske, which uses it to make the beryllium alloy, is that correct?

Dr. KERTESS. We might sell to Siemens & Halske. I am not familiar with the customers of our company in Germany. We sell a good deal to Dr. Rohn and what is known and mentioned here this morning as the Heraeus Vacuumschmelze which combines materials.

Mr. Cox. That is really what I had in mind. We have had testimony about that company buying from Siemens & Halske. Your company doesn't manufacture any alloys?

Dr. KERTESS. No.

Mr. Cox. And neither Siemens & Halske nor Dr. Rohn's company, as far as you know, manufactures any pure beryllium?

Dr. KERTESS. No.

Mr. Cox. Is there any other company in Germany that you know of that manufacturers and sells pure beryllium?

Dr. KERTESS. No; we are the only one; and in order to save guesswork and make the situation slightly clearer, in view of some exonerations that have come out on the witness stand, I wish to state, while it might be a secret, but in order to cooperate fully, that we never produce more than actually 200 pounds of beryllium metal over the month, and since 8 months the factory has been shut down, production is down to nothing, and I also wish to state that not a single pound of beryllium metal is going into any military purposes whatsoever, and not going into any airplane whatsoever in Germany.

Mr. Cox. Will you tell us, Doctor, whether that has always been the case, if you care to?

Dr. KERTESS. I am perfectly willing to state that for a while an airplane company in Germany which had a license on what is known in this country as a patent Whitney propeller box used beryllium metal or rather beryllium alloy for a while, the use of which has been completely discontinued.

Mr. Cox. What are your duties in this country for your company in connection with beryllium, Dr. Kertess?

Dr. KERTESS. Well, it is the same as it is in other fields. We very strongly believe in international cooperation and international trade. We keep up the office here to keep in touch with American friends on various problems and as to beryllium naturally we are here to watch and hope to find some day commercial uses for beryllium metal, looking for leads to the United States.

Mr. Cox. You know, of course, Dr. Sawyer, of the Brush Beryllium Co.?

Dr. KERTESS. I have met Dr. Sawyer in my endeavors, also; yes.

Mr. Cox. That has been described here as the company which is engaged in producing beryllium alloy. You are aware of that, I suppose?

Dr. KERTESS. Yes; I am.

Mr. Cox. Doctor, you recall in December of 1935 you wrote a letter to Dr. Sawyer containing some observations about the beryllium industry in this country?

Dr. KERTESS. If I see the letter I might recollect.

(Mr. Cox handed the witness some papers.)

Dr. KERTESS. Yes; I wrote this letter, stating specifically that it was written as a personal suggestion and not as representative of the company.

Mr. Cox. I am not interested in all of this letter, but there are two or three passages I should like to read now for the record and then I will ask you some questions about them. I will begin with the statement—

The CHAIRMAN (interposing). Are you reading from the letter which the witness has just identified?

Mr. Cox. I am going to identify the letter. I will begin by identifying the letter as a letter written by Dr. Kertess to Dr. C. B. Sawyer, Brush Beryllium Co., 3715 Euclid Avenue, Cleveland, Ohio, dated December 13, 1935:

Will you please consider this a private letter and not written as from the representative of Degussa.

I then drop down to the third line of the second paragraph.

It came to my mind whether it would be a good thing for all of us if you could consider some cooperative basis with beryllium products companies.

Who do you mean by the words "for all of us"?

Dr. KERTESS. The question is this: If you have a new metal for which a use has still to be developed, we consider it essential to invite cooperation of all that are interested in the development of such metal in order to really establish a common interest on research, on application, and all other things, referring to such new metal.

Mr. ARNOLD. A common interest in applications for patents?

Dr. KERTESS. Patents on research. After all, gentlemen, we have in our safes in Frankfurt considerable amount of work done on beryllium and on other metals, and we believe that by international cooperation with people who have done scientific work we can save an awful lot of time, money, and work by cooperation.

Mr. ARNOLD. Then you are not interested in getting the exclusive rights by patents?

Dr. KERTESS. No, sir.

Mr. Cox. Then you were really thinking of a pooling of effort?

Dr. KERTESS. Pooling of effort and division of research. One firm might work in this direction, another firm in this direction, in order to reach the aim with less difficulties.

Mr. Cox. I call your attention to the sixth paragraph of this letter, which reads as follows:

If you, for instance, could come to a comparatively loose agreement with Beryllium Products Co., your company handling the metal, Beryllium Products

handling the alloys, or whether you could even make up your mind to acquire shares in the Beryllium Products Co. to make the tie a closer one, it would naturally be a matter you have to decide yourself.

Now, referring to the first part of that paragraph, when you speak of a comparatively loose agreement with Beryllium Products Co., your company handling the metals, Beryllium Products handling the alloys, that kind of an arrangement in a general way would be analogous to the arrangement which exists in Germany, would it not?

Dr. KERTESS. Right.

Mr. Cox. And of course at the time you wrote this letter, Brush Beryllium and Beryllium Products Co. were both engaged in producing the master alloy?

Dr. KERTESS. Right.

Mr. Cox. And as a result there was price competition between the two companies in that respect, was there not, Doctor?

Dr. KERTESS. Yes.

Mr. Cox. And of course this kind of a loose arrangement which you have described here would serve to eliminate that price competition, would it not?

Dr. KERTESS. Not necessarily, Mr. Cox.

Mr. Cox. Well, there could be no competition between two companies if they were not producing the same thing?

Dr. KERTESS. But, after all, if we devote our efforts at the same time in the same direction, I still maintain we can achieve more, having one work on the exploitation of beryllium metal and the other one in the alloy, and still have a competitive market.

Mr. Cox. I grant you the results might be greater.

Dr. KERTESS. On research. Don't forget.

Mr. Cox. But the result—you are not talking here about sales?

Dr. KERTESS. No, sir; I am talking on research only.

Mr. Cox. You had no—

Dr. KERTESS (interposing). I am not interested in the sale of beryllium; no, sir.

Mr. Cox. Now, I call your attention to the seventh paragraph of the letter, which reads as follows:

Should such cooperation between you and Mr. Gahagan be possibly established, we would throw in our own experience and development. I feel that beryllium and its alloys could be made an object, giving extensive profits to all concerned, saving tremendous expense to each and everyone of us, and giving special benefit to all to make such thought worth while.

Now, when you spoke there of extensive profits and saving tremendous expense, you had merely in mind duplication of expense in connection with research?

Dr. KERTESS. Yes; we couldn't possibly be interested in any selling corporation here, Mr. Cox. We can only be interested in scientific research.

Mr. ARNOLD. Had you meant that, wouldn't the words "extensive savings" been more appropriate rather than the words "extensive profits"?

Dr. KERTESS. It might be. It might be a wrong word that I have used, but that is at least what it suggested.

Mr. ARNOLD. You didn't have any idea of profits when you said "profits"?

Dr. KERTESS. No, sir.

Mr. Cox. Of course, the arrangement that I spoke of a moment ago in Germany is an arrangement where there is no price competition so far as the production of the pure metal is concerned?

Dr. KERTESS. There is no price competition at the present time due to the fact that no one finds it possible to go into the production of beryllium metal due to the lack of any market for the metal.

Mr. Cox. But the fact is that your company is the only one that is producing the pure metal.

Dr. KERTESS. Yes; but I wish to say in this connection, not due to any control of patents—in fact, we have no patents.

Mr. Cox. You have no patents?

Dr. KERTESS. No; not on the production of beryllium metal. Anyone can produce beryllium metal today in Germany without infringing on any patents we might have.

Mr. Cox. Do you have any patents on equipment used in that connection?

Dr. KERTESS. I want to be careful; no; to my knowledge; no.

The CHAIRMAN. How about patents on alloys, on making the alloys?

Dr. KERTESS. Except the patents that we have taken over from Siemens & Halske, we have not.

The CHAIRMAN. That is the patent, is it not?

Dr. KERTESS. Yes.

The CHAIRMAN. That is the significant and central fact in the whole system.

Dr. KERTESS. No; it isn't, Mr. Chairman; due to the fact, as I wanted to point out, that anyone in Germany is perfectly free to go into the manufacture of beryllium metal today.

The CHAIRMAN. Oh, very well, that is quite clear.

Dr. KERTESS. If he considers it a profitable venture.

The CHAIRMAN. That is quite clear, the beryllium metal of itself is apparently not commercially valuable of itself. It is usable principally for commercial purposes as an alloy, is it not?

Dr. KERTESS. Yes; but even as an alloy the use is a very small one, exceedingly small.

The CHAIRMAN. Oh, the use is very, very small?

Dr. KERTESS. Exceedingly small.

The CHAIRMAN. Then what is the reason for the great interest which is being displayed by the Siemens Co. and the subsidiary of the Siemens Co. and the Beryllium Products Co. and the Brush Beryllium Products Co. and the other competing companies which you mentioned here a moment ago in the development of this material which is of such little value?

Dr. KERTESS. I should like to know also because we haven't been able to find out yet. We hope—you mustn't forget—as metallurgists, as we are quite an important factor, we are looking to the future with hope but so far it has not reached any importance whatsoever.

The CHAIRMAN. But apparently a great deal of money has been expended?

Dr. KERTESS. Immensely. We spent quite a good deal of money on the development of zirconium metal and still haven't gotten a penny of it so far.

The CHAIRMAN. In that paragraph to which attention has just been directed, you spoke not only of extensive profits, which you didn't mean—

Dr. KERTESS (interposing). Savings; yes.

The CHAIRMAN. But also on saving tremendous expenses. Did you mean expenses?

Dr. KERTESS. On research; yes.

Mr. Cox. You meant the same thing when you said saving tremendous expenses as when you said giving extensive profits—you said the same thing twice?

Dr. KERTESS. Yes.

Mr. ARNOLD. You don't mean this letter is entirely about research, do you?

Dr. KERTESS. Yes, because we aren't interested in the sale.

Mr. ARNOLD. Then you say if you, for instance, could come to a comparatively loose agreement with Beryllium Products Co., your company handling the matter, do you mean handling the matters refers to research?

Dr. KERTESS. Yes.

Mr. ARNOLD. Or whether you could make up your mind to acquire shares, you have to acquire shares in order to protect this research?

Dr. KERTESS. Yes.

Mr. ARNOLD. And you also meant by the word profits, research?

Dr. KERTESS. Yes.

Mr. ARNOLD. So handling the metals, handling the alloys and acquiring shares and profits all refer to research?

Dr. KERTESS. Only.

The CHAIRMAN. Then what did you mean by the final paragraph which is extremely interesting, the last sentence in the paragraph, I believe:

However, I feel that our Frankfurt headquarters have to give due consideration to the patent situation as well as to the commercial progress Beryllium Products Co. undeniably has made up to this time.

Did you write that?

Dr. KERTESS. Yes; I did.

The CHAIRMAN. Has the Beryllium Products Co. undeniably made great commercial progress in the disposal of beryllium products?

Dr. KERTESS. At that time they did sell quite a number of beryllium alloys; yes.

The CHAIRMAN. Oh, well, then at the time you did recognize the fact that there were profits in the industry?

Dr. KERTESS. At the time it looked as if we had finally found a commercial use; but, as I pointed out to you before, the use since has been discontinued.

The CHAIRMAN. So, then, your interpretation of the letter now depends upon the present conditions and not upon the conditions at the time the letter was written?

Dr. KERTESS. At that time the situation looked very much more favorable than it does to us today.

The CHAIRMAN. But I understood you a moment ago to say at the time you wrote the letter you were concerned only in research, but now you said commercial profits had undeniably been made.

Dr. KERTESS. Yes; but, Mr. Chairman, at that time research had developed to such an extent that there was a huge development for beryllium alloys, as I have pointed out, in connection with propeller boxes for airplanes.

Mr. Cox. I have a paragraph I should like to ask you about on the first page of the letter. In the last sentence in the third paragraph you say of the Beryllium Products Corporation,

They are in a position to produce beryllium alloys on a commercial basis. As you know, they hold important key patents and for the moment it can be disregarded whether such possessions means a tight control or whether another manufacturer could disrespect them. If so, it could certainly not be done without lots of trouble and cost.

When you spoke of tight control there, you didn't mean tight control of research, did you, Doctor?

Dr. KERTESS. No; tight control of the patents for the use of beryllium alloys due to the acquisition of Siemens & Halske Corporation.

Mr. Cox. Well, that kind of tight control would be manifested by the control of the sale and exportation?

Dr. KERTESS. Yes.

Mr. Cox. So at least in that paragraph of the letter you were talking about sales?

Dr. KERTESS. If you interpret it this way; yes. But don't forget, we are not interested in the sale.

Mr. Cox. I thought you had agreed with me a moment ago about the interpretation of that paragraph.

Mr. ARNOLD. Then the letter isn't entirely about research, is it?

Dr. KERTESS. Not according to the sentence just read, it isn't.

Mr. Cox. Did you ever take any additional steps to forward this proposal in any way?

Dr. KERTESS. No; nothing.

Mr. Cox. Dr. Sawyer replied to your letter but—I think we have the reply—it was not a reply which led to any additional steps on your part?

Dr. KERTESS. No; no additional discussions of the subject whatsoever.

The CHAIRMAN. Would you recommend any change in the use of patents and the issuance of patents on an international basis?

Dr. KERTESS. I don't think I am fit to make any proposal on international patent situation, not sufficiently familiar with the situation.

The CHAIRMAN. You have been interested in the effect upon research?

Dr. KERTESS. Yes.

The CHAIRMAN. Well, do you think that any changes could be made in the system advantageously, that really—

Dr. KERTESS. I mean I am not familiar with the subject on international patents.

The CHAIRMAN. You would not forego the patent rights which your companies have?

Dr. KERTESS. Why should we?

Mr. ARNOLD. In the interest of research, would you forego them? [Laughter.]

Dr. KERTESS. I will tell you if you ask that question, I tell you just as frankly that we are very much more interested in exchanging research information than we are in making royalties or dollars in

royalties or anything like that, and I want to—I have no hesitation—

Mr. ARNOLD (interposing). If you were and the patents got in your way you would forego the patents, I take it?

Dr. KERTESS. It has been done.

Mr. COX. There is one question I want to ask you, Doctor. I think I have forgotten to do it. You are licensed by Dr. Rohn, or by Siemens, I don't know which one, in Germany to use certain patents in connection with the production of pure beryllium, is that correct?

Dr. KERTESS. I have no knowledge of that.

Mr. COX. You don't know about that?

Dr. KERTESS. I don't know the arrangements between the headquarters and Dr. Rohn.

Mr. COX. Do you know whether or not your company in Germany can sell pure beryllium metal without Dr. Rohn's consent?

Dr. KERTESS. I think we can.

Mr. COX. You are quite positive about that?

Dr. KERTESS. I am quite positive about it, yes.

The CHAIRMAN. What is this corporation for which you speak?

Dr. KERTESS. The Deutsche Gold und Silber Scheideanstalt, which means an assaying institution. The company was founded in 1876 and is engaged in the production of metals and chemicals.

The CHAIRMAN. Silber is assaying?

Dr. KERTESS. Assaying.

The CHAIRMAN. It is a German corporation?

Dr. KERTESS. It is a German corporation.

The CHAIRMAN. Organized under what law?

Dr. KERTESS. Under the German law.

The CHAIRMAN. The law of the Empire or of a particular State?

Dr. KERTESS. The law of the empire.

The CHAIRMAN. Is it a private corporation?

Dr. KERTESS. Completely private; yes.

The CHAIRMAN. Is it wholly owned by Siemens?

Dr. KERTESS. It is not owned by Siemens at all.

The CHAIRMAN. Oh, it is not. Well, then I misunderstood; it is independent.

Dr. KERTESS. It is entirely independent. The shares being in the hands of private stockholders.

The CHAIRMAN. And who are the directors?

Dr. KERTESS. There are about nine directors.

The CHAIRMAN. About nine?

Dr. KERTESS. Yes.

The CHAIRMAN. Have any of them any relationship of any kind with Siemens?

Dr. KERTESS. No; no interlocking relationship at all.

The CHAIRMAN. Do you have any relationship with Siemens?

Dr. KERTESS. Do we have any?

The CHAIRMAN. Yes.

Dr. KERTESS. No.

The CHAIRMAN. Do you personally have any?

Dr. KERTESS. No; I have none.

The CHAIRMAN. I misunderstood you, apparently, at the beginning of your testimony. I thought you did have some relationship with Siemens.

Dr. KERTESS. I said we had taken over the beryllium interests from them.

The CHAIRMAN. In what manner?

Dr. KERTESS. Purchased, but outside we have no interlocking arrangements.

The CHAIRMAN. In what manner?

Dr. KERTESS. I am sorry, I don't know the conditions. I think it was an outright purchase of the beryllium interests taking over the stock of the ore and the metal and patents.

The CHAIRMAN. Do you understand that Siemens no longer has any interest in beryllium?

Dr. KERTESS. Yes.

The CHAIRMAN. Did you take over this contract which was put in the record?

Dr. KERTESS. That was taken over by the Deutsche Gold und Silber-Scheideanstalt.

The CHAIRMAN. So that you then are the spokesman for the company which retained all the European rights for the development of the beryllium?

Dr. KERTESS. Beryllium metal; yes.

The CHAIRMAN. Siemens no longer has anything to do with it?

Dr. KERTESS. No.

The CHAIRMAN. Do you have an office in New York?

Dr. KERTESS. Yes.

The CHAIRMAN. Anywhere else in this country?

Dr. KERTESS. No.

The CHAIRMAN. Do you have an office in any other American countries?

Dr. KERTESS. No.

The CHAIRMAN. Where are your European offices?

Dr. KERTESS. Frankfurt is the headquarters.

The CHAIRMAN. Are you an officer and director of this company?

Dr. KERTESS. In Frankfurt?

The CHAIRMAN. Yes.

Dr. KERTESS. No. I am an employee of the company.

The CHAIRMAN. What is your designation?

Dr. KERTESS. American representative.

The CHAIRMAN. Do you intend to present that letter for the record?

Dr. KERTESS. No; Mr. Chairman.

The CHAIRMAN. Do any members of the committee desire to ask Dr. Kertess any questions?

Mr. HENDERSON. Dr. Kertess, I understood that you said you did not know who were the customers in Germany of Degussa for beryllium metal.

Dr. KERTESS. No; I don't know the customers to whom we sell beryllium metal except that I know Dr. Rohn and the Heraeus Vacuumschmelze buy beryllium metal.

Mr. HENDERSON. I understood you to say very positively that you knew there was none of this being used for military purposes or the building of airplanes.

Dr. KERTESS. Right.

Mr. HENDERSON. How do you reconcile the two statements?

Dr. KERTESS. I mean that is not a question of customer; we are in permanent exchange on the possible uses of beryllium metal and beryllium alloys, and naturally, if I had come to Frankfurt I would be told the beryllium metal plant has been shut down completely, due to the fact that there isn't a pound of beryllium metal sold.

Mr. HENDERSON. There might be some inventory.

Dr. KERTESS. That is the information I have from headquarters.

Mr. HENDERSON. That is what I am trying to establish. You say you don't know the customers, but you know the uses to which it is being applied in Germany very positively.

Dr. KERTESS. I do, yes; but I wouldn't know the customers and the names of the customers. I made that statement only in order to cooperate to the fullest extent; it isn't to hide anything at all, but, due to the statement by one of the witnesses this morning, he used such words as a tremendous use of beryllium metal and beryllium alloys in Germany, and there is no such tremendous use, I assure you. You probably could look up the import statistics of Germany on beryllium—I am not familiar with the amount of beryllium ore that has entered Germany—and you would notice from that how little beryllium is being used, so it is a fact that there is no use for it of any size.

Dr. LUBIN. Where does Germany get her supplies of beryllium?

Dr. KERTESS. To the largest extent from the United States.

Mr. HENDERSON. Do you also get some from Brazil?

Dr. KERTESS. They might; yes. I am not familiar with it. I am only familiar whenever I do some purchasing in this country.

The CHAIRMAN. Do you see any future to the use of beryllium?

Dr. KERTESS. Only hope, Mr. Chairman.

Mr. HENDERSON. Do I understand you make the purchases in America?

Dr. KERTESS. Yes; I do.

Mr. HENDERSON. What particular territory does that come from?

Dr. KERTESS. I don't want to say whether it comes from Colorado or Idaho because it is bought in New York from a New York company.

Mr. HENDERSON. Have you bought any recently?

Dr. KERTESS. No; we haven't bought any, I think, for at least 2 years, if not 3, and I would have to look in the files to state that definitely.

The CHAIRMAN. Are there any other questions to be asked of this witness? If not, Mr. Kertess, we are indebted to you.

(The witness was excused.)

The CHAIRMAN. Mr. Cox, what is your desire now?

Mr. Cox. I would like to adjourn now.

The CHAIRMAN. Will you be ready to proceed tomorrow morning?

Mr. Cox. Yes, sir.

The CHAIRMAN. The committee will stand in recess until 10 o'clock tomorrow morning.

(Whereupon, at 5:08 p. m., a recess was taken until Tuesday, May 9, 1939, at 10 a. m.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

TUESDAY, MAY 9, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington D. C.

The committee met at 10:25 a. m., pursuant to adjournment on Monday, May 8, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senator O'Mahoney (chairman), Representative Reece, Messrs. Ferguson, Lubin, O'Connell, Arnold, Berge, Henderson, Edward C. Eicher, representing Securities and Exchange Commission; W. A. Janssen, representing Department of Commerce, and Willis J. Ballinger, representing Federal Trade Commission.

Present also: Senator Homer T. Bone, chairman, United States Senate Committee on Patents; Joseph Borkin, economic expert; Hugh Cox, Ernest Meyers, and James C. Wilson, attorneys, Department of Justice.

The CHAIRMAN. The committee will please come to order. Mr. Cox, are you ready to proceed? Call the first witness, please.

Mr. Cox. The first witness will be Dr. Sawyer.

The CHAIRMAN. Do you solemnly swear that the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Dr. SAWYER. I do.

TESTIMONY OF CHARLES BALDWIN SAWYER, PRESIDENT, THE BRUSH BERYLLIUM CO., CLEVELAND, OHIO

Mr. Cox. Will you give the reporter your full name and address and tell the committee what your occupation is?

Dr. SAWYER. My name is Charles Baldwin Sawyer, 314 Chester Avenue, Cleveland, Ohio. I am president of the Brush Beryllium Co., and I am chairman of the board of the Brush Laboratories Co.

Mr. Cox. What is the business of the Brush Beryllium Co.?

Dr. SAWYER. The business of the Brush Beryllium Co. is the production of all chemicals and alloys which we may eventually derive from the element beryllium.

Mr. Cox. What is the relation, if any, between Brush Beryllium Co. and the Brush Laboratories Co.?

Dr. SAWYER. The Brush Laboratories Co. was founded in 1921 and had for its purpose the development of processes which might turn into small and large industries. It was contrary to the usual course of events, where a laboratory is attached to a going industry. In this

instance we hoped to attach industries to a laboratory and a product of research. The Brush Laboratories has produced two small industries. One of them is known as the Brush Development Co., making crystals for use in microphones, and so forth. The other is the Brush Beryllium Co. Because the Brush Laboratories was founded in 1921 and has maintained the same staff throughout, making it available also to the Brush Beryllium Co., I believe that we may claim the distinction of having worked longer and more continuously on beryllium than any other organization in the United States.

Mr. Cox. What kind of beryllium alloys does the Brush Beryllium Co. sell now?

Dr. SAWYER. The Brush Beryllium Co. has its principal business in the master alloy of beryllium copper, containing 4 percent of beryllium. It is our business to sell that to rolling mills and to foundries. We also sell certain beryllium copper ingots containing a small amount of nickel, which follows in consequence of the patent situation. We also sell other special alloys of beryllium as may be required, principally for research purposes.

Mr. Cox. How long has the company been selling the master copper alloy that you spoke of a moment ago?

Dr. SAWYER. The Brush Beryllium Co. was incorporated in 1931, and I believe that our first considerable order for beryllium copper master alloy was in December of 1934.

Mr. Cox. You sell that particular alloy in competition with the American Beryllium Corporation. Is that correct?

Dr. SAWYER. Yes; we sell that alloy in competition with the Beryllium Corporation of America or the Beryllium Products Corporation, I am not clear which is the active principal here, and so far as I know we have no other active competitors.

Mr. Cox. Hereafter, if I refer to Mr. Gahagan's company, will you take it that I mean either one or both of those companies?

Dr. SAWYER. I will.

COMBINATION OF COMPANIES PROPOSED

Mr. Cox. Dr. Sawyer, you heard the testimony which was given yesterday by Dr. Kertess about the letter to you which was dated December 13, 1935?¹

Dr. SAWYER. Yes; I did.

Mr. Cox. As a result of that letter, did you take any steps to follow up the proposals which Dr. Kertess made?

Dr. SAWYER. Absolutely not. I discouraged them.

Mr. Cox. You were not interested in that sort of proposition?

Dr. SAWYER. We are not interested in any sort of combination.

Mr. Cox. And you did understand, didn't you, that that letter was proposing a kind of combination with Mr. Gahagan's company?

Dr. SAWYER. It proposed something of the sort. What kind was not a matter of concern to me.

Mr. Cox. You weren't interested in any kind of combination?

Dr. SAWYER. We are interested in carrying on our own business and attending to our business.

Mr. Cox. As a matter of fact, Mr. Montague, of The American Brass Co., suggested to you one time, after seeing that letter, did he

¹ Supra, p. 2070.

not, that the kind of combination proposed there might be in violation of the antitrust laws?

Dr. SAWYER. I don't recall that Mr. Montague suggested anything of the sort. My memory may not be accurate on that point. I know that the consideration came to my mind.

Mr. Cox. You thought of that?

Dr. SAWYER. I wouldn't be clear on that point. I know it was there.

Mr. Cox. The thought was there?

Dr. SAWYER. The thought was there.

Mr. Cox. You are not clear as to whether you thought of it or whether Mr. Montague did?

Dr. SAWYER. No; it is too far back.

Mr. Cox. Was it the only proposal that has ever been made to you by any representative of a German company about a combination with Mr. Gahagan's company?

Dr. SAWYER. No; it is far from the only proposal that has ever been made to me.

Mr. Cox. There was a proposal of that kind made to you last year, wasn't there, Dr. Sawyer?

Dr. SAWYER. Yes; the eminent authority Dr. Rohn, whose processes are reputed to be indispensable for the production of beryllium in the world of high quality, made that proposal to me.

Mr. Cox. That was in September 13, 1938, or thereabouts, wasn't it?

Dr. SAWYER. I would think so; yes.

Mr. Cox. I am going to hand you a document and ask you whether this is a memorandum which you prepared after a conference with Dr. Rohn and Frederick Stanley Giller.

Dr. SAWYER. Yes; this appears to be the memorandum that I prepared. This is in the form of an affidavit. I have forgotten there was so much of it. Yes; I can identify that.

Mr. Cox. This memorandum was prepared after the conference you had—

Dr. SAWYER (interposing). Yes; it was.

Mr. Cox. With Dr. Rohn and Mr. Giller.

On the page marked "6½" in this memorandum the following statement occurs:

One of the most surprising sallies of the afternoon was a ponderous appeal on the part of Dr. Rohn that we who have a strong foundation in the Brush Development Co. should not cut the feet out from under our competitor by pierce competition. He evidently expected us to feel sorry for Gahagan and go out of business on his account.

Do you remember that statement?

Dr. SAWYER. I certainly do.

Mr. Cox. That was an appeal to you to abandon any kind of price competition, was it not, between your company and Mr. Gahagan's company?

Dr. SAWYER. I would say that there was that thought in the background most decidedly.

Mr. Cox. Then I call your attention to a statement which occurs on page 7 of this memorandum:

We received a considerable lecture on the subject of cooperation with Rohn, saying that he had brought together five or six British companies who were

quite at loggerhead and that this had resulted in raising their prices 30 percent with dividends regularly ever since.

Do you remember that statement?

Dr. SAWYER. Yes; I do.

Mr. Cox. That was a vivid description of the benefits which might be expected to follow if you did abandon price competition with Mr. Gahagan?

Dr. SAWYER. According to Dr. Rohn's ideas it was.

Mr. Cox. Now, I also call your attention to a statement which occurs on page 9 of this memorandum which reads as follows:

Furthermore, we believe that Dr. Rohn is seriously disturbed by our meddling with the European market, something which they are in a position to prevent Gahagan from doing.

Do you remember that?

Dr. SAWYER. Yes; I do.

Mr. Cox. Will you tell us briefly what it was that led you to that opinion?

Dr. SAWYER. We had been quoting prices in the foreign market presumably under those quoted by the company which Rohn represented. If I remember correctly, their prices were around 30 or 35 dollars per pound and we had been quoting, as I recall it, around 20 for exporting. We also had had one of our representatives visit the Philipps Co. in Holland and he had just returned from that trip. It was his remark that he had visited Philipps which apparently touched Dr. Rohn off in some kind of a facial expression.

Mr. Cox. Had you sold any beryllium on continental Europe?

Dr. SAWYER. Very little.

Mr. Cox. But you had made one or two sales; is that correct?

Dr. SAWYER. We had made one or two sales.

Mr. Cox. One sale in Austria, had you not?

Dr. SAWYER. I am not clear. In my recollection they were unimportant.

Mr. Cox. But you thought they were enough to arouse this fear on the part of Dr. Rohn and the possibility of price competition there?

Dr. SAWYER. More important than the sales were the quotations.

Mr. Cox. You mean the prices at which you were quoting beryllium. And I assume from what you said that you were not interested in those proposals which were made to you by Dr. Rohn?

Dr. SAWYER. No; we certainly were not.

Mr. Cox. Now, would it be an accurate description of your attitude to say that it was your opinion that in the development of beryllium it was desirable to, so far as possible, decrease the price of the master alloy rather than to hold it rigid or to increase it?

REDUCTION IN PRICE OF BERYLLIUM SOUGHT TO INCREASE SALES VOLUME

Dr. SAWYER. We feel that the industry can only come into a real existence when the price is lowered sufficiently so that all concerned in the industry get sufficient volume to get away from the curse of the minute volume now existing.

Mr. Cox. Of course, it is a fact, is it not, Dr. Sawyer, that you have consistently reduced your price?

Dr. SAWYER. It is such a fact, that at every opportunity we have tried to get down to the point where the volume would build up;

for instance, the rolling mills have rather a small volume, and that adds to their cost which, in turn, adds to the cost of the material to the ultimate consumer. That condition will have to be overcome always by large volume.

Mr. Cox. So you think it is a desirable thing not only to have the price of the master alloy go down but also to have the price of the fabricated product go down.

Dr. SAWYER. As fast as it can. It must be recognized that there are two separate problems there.

Mr. Cox. As fast as it is feasible to do so, you think it is desirable to decrease the price of the fabricated product.

Dr. SAWYER. Yes; but the problems are not the same. I want to make that very clear.

Mr. Cox. But it is also your opinion that when a decrease is possible in the price of the fabricated product it may be reasonably expected that that will increase volume.

Dr. SAWYER. Yes; and I found that that attitude is reflected from the mills.

Mr. Cox. You mean your experience has been that?

Dr. SAWYER. Yes. They also like to reduce the price for larger volume.

Mr. Cox. Dr. Sawyer, we have prepared a chart which shows the decrease in the price of the master alloy sold by your company. I believe you have seen this and agree it is an accurate representation of those prices?

Dr. SAWYER. Yes; that is as accurate as I am able to confirm at this time.

Mr. Cox. Well, perhaps, then, for the sake of the record we should put those prices in more definitely. You started selling it in 1933 or '34?

Dr. SAWYER. December '34..

Mr. Cox. And your first price was \$25 a pound?

Dr. SAWYER. That is right.

Mr. Cox. And thereafter that price was reduced to \$23 a pound?

Dr. SAWYER. That is correct.

Mr. Cox. When was that reduction?

Dr. SAWYER. The reduction, as far as I can recall, was toward the end of 1935.

Mr. Cox. And then the price remained \$23 through 1936 and 1937, 1938; is that correct?

Dr. SAWYER. Yes.

Mr. Cox. And on February 9 of this year the price was lowered to \$15?¹

Dr. SAWYER. That is correct. Whether that is February 9 or not—

Mr. Cox. That is approximately correct?

Dr. SAWYER. Yes.

Mr. Cox. Mr. Chairman, I should like to offer this chart in evidence.

(The chart referred to was marked "Exhibit No. 482" and is included in the appendix on p. 2283.)

The CHAIRMAN. It may be received.

¹ For statement by Representative Reece on a reduction in the price of beryllium subsequent to this testimony, see hearings held June 16, 1939.

Mr. Cox. I should like to interrupt Dr. Sawyer's testimony at this point to call another witness, if I may. Dr. Sawyer is going to return to the stand.

The CHAIRMAN. Very well.

Mr. Cox. Mr. Randall.

The CHAIRMAN. Do you solemnly swear that the testimony you are about to give in this proceeding shall be the truth, the whole truth and nothing but the truth, so help you God?

Mr. RANDALL. I do. I want to say I am just recovering from a very bad case of laryngitis. If you can't understand me very well, I will have to apologize.

TESTIMONY OF H. L. RANDALL, PRESIDENT, RIVERSIDE METAL CO., RIVERSIDE, N. J.

Mr. Cox. You are the president of the Riverside Brass Co?

Mr. RANDALL. Riverside Metal Co.

Mr. Cox. What is the business of that company?

Mr. RANDALL. The business of the Riverside Metal Co. is the fabrication of nonferrous alloys into rod, wire, sheet, and strip. We supply the manufacturer with a raw product.

Mr. Cox. You buy the master alloy and fabricate the material?

Mr. RANDALL. That is correct.

Mr. Cox. I am speaking of beryllium when I say that.

Mr. RANDALL. I didn't understand you.

Mr. Cox. What kind of alloys other than beryllium do you make?

Mr. RANDALL. Well, we make nickel silvers, phosphor bronzes, some brass; I think altogether we have an alloy list of over 80 different alloys.

Mr. Cox. Are all of the alloys which your company makes alloys which are also made and sold by The American Brass Co.?

Mr. RANDALL. I think that would be true.

Mr. Cox. How large a company is your company? Will you give us your capitalization?

Mr. RANDALL. Our capitalization is one and half million dollars, and we are almost the smallest unit in the industry; there may be one or two smaller, but I think we are almost the smallest.

Mr. Cox. Can you give us any approximate figure to indicate what percentage of the industry your company controls?

Mr. RANDALL. Less than one and a half percent.

Mr. Cox. Less than one and a half percent. You testified a moment ago that you bought the master beryllium alloy and fabricated that into strip?

Mr. RANDALL. That is correct.

Mr. Cox. A commodity which you then sell to persons who manufacture that into particular articles; is that correct?

Mr. RANDALL. That is correct.

Mr. Cox. Will you tell this committee in general what kind of articles your customers make from beryllium that they purchase from you?

Mr. RANDALL. Well, they make nonsparking tools. Possibly those should be called safety tools, rather than nonsparking. They make diaphragms, contact parts for switches, a certain welding equipment. Offhand, that is all I can think of. There are probably others, but I don't think of them.

EFFECT OF PATENT SITUATION ON PURCHASES OF BERYLLIUM ALLOYS

Mr. Cox. From whom do you buy the master alloys?

Mr. RANDALL. We buy the master alloys from the Beryllium Products Corporation.

Mr. Cox. That is Mr. Gahagan?

Mr. RANDALL. Mr. Gahagan.

Mr. Cox. Have you always bought all of your master alloy from that company?

Mr. RANDALL. Practically all; yes.

Mr. Cox. Is there any reason why you buy it from them, rather than from Brush Beryllium, which makes a similar alloy?

Mr. RANDALL. Well, I have always felt that when the patent situation entered into it, the Masing-Dahl patent, I think it is, in which the treating of the beryllium alloy is controlled and it has been my understanding that Mr. Gahagan's company controlled that patent, or patents, in this country, and for that reason we felt it well to deal with the Beryllium Corporation, in view of that situation.

Mr. Cox. There have been times, have there not, when Mr. Gahagan's price for master alloy was higher than the price of Brush Beryllium?

Mr. RANDALL. I can't answer that question. I don't know that that is so.

Mr. Cox. You don't recall, Mr. Randall, that at one point in 1936 you found out that although you had been buying master alloy from Mr. Gahagan's company at \$30 a pound, The American Brass Co. had been buying it from the Brush Beryllium for \$23 a pound?

Mr. RANDALL. That is correct, sir; I remember that now.

Mr. Cox. Mr. Randall, is this typewritten statement a correct statement of your base prices for beryllium-copper?

Mr. RANDALL. That is correct.

Mr. Cox. This statement shows the prices beginning March 1, 1933, and to and including April 20, 1939? Base price is a price exclusive of so-called extras, is it not?

Mr. RANDALL. That is correct.

Mr. Cox. And hereafter when I refer to price will you understand that I am referring to the base price, not to a price including computation of any extras? I should like to offer this price statement in evidence.

(The document referred to was marked "Exhibit No. 483" and is included in the appendix on p. 2284.)

Mr. Cox. This chart which is based on a typewritten statement which has already been introduced in evidence I now offer as an exhibit also.

(The chart referred to was marked "Exhibit No. 484" and is included in the appendix on p. 2285.)

"FOLLOW THE LEADER" POLICY OF PRICING

Mr. Cox. Mr. Randall, would it be correct to say that there is a well crystallized practice of price leadership in the industry in which you are engaged?

Mr. RANDALL. I would say so.

Mr. COX. And what company is the price leader?

Mr. RANDALL. I would say The American Brass Co. holds that position.

Mr. COX. And your company follows the prices which are announced by The American Brass?

Mr. RANDALL. That is correct.

Mr. COX. So that when they reduce the price you have to reduce it, too. Is that correct?

Mr. RANDALL. Well, we don't have to, but we do.

Mr. COX. And when they raise the price you raise the price.

Mr. RANDALL. That is correct.

Mr. COX. Do you remember that in February 1937, Mr. Gahagan's company reduced the price of the master alloy from \$30 to \$23 a pound?

Mr. RANDALL. I didn't know it at that time.

Mr. COX. You did know there was a price decrease.

Mr. RANDALL. I do now.

Mr. COX. Weren't you buying any from Mr. Gahagan?

Mr. RANDALL. I think we were buying from them but it was quite some time after that that I got the information that the price had gone down.

Mr. COX. After that decrease in the price of the master alloy, it is a fact, isn't it, that there was no decrease in price of the fabricated product which you made?

Mr. RANDALL. I don't remember about that, I don't know, because I don't know when that decrease took place.

Mr. COX. Looking at your sheet prices for the year 1937, you started at \$1.01 a pound on January 14, 1937, and rose progressively until you reached \$1.60 on March 31, and then on April 6, 1937, they dropped to \$1.05. You remember those.

Mr. RANDALL. Yes; I remember those. That was copper.

Mr. COX. It wasn't all copper.

Mr. RANDALL. Where the change was very small, a fraction of a cent, it was copper.

Mr. COX. A fraction of a cent change was copper?

Mr. RANDALL. Yes; I would think so.

Mr. COX. But you do know there was about that time a decrease of \$7 a pound in the price which you were paying to Mr. Gahagan.

Mr. RANDALL. Yes; I do know that.

Mr. COX. I will put this question to you, Mr. Randall. Why didn't you reduce the price of the fabricated product following that decrease in the price of the master alloy?

Mr. RANDALL. Well, of course I would not make a reduction in the base price of beryllium copper unless The American Brass made a price reduction in beryllium copper.

Mr. COX. And The American Brass Co. made no reduction at that time?

Mr. RANDALL. If they did, we did, as indicated on that sheet.

Mr. COX. Assuming you didn't make a price change then, the reason you didn't was because The American Brass Co. didn't.

Mr. RANDALL. That is correct.

Mr. ARNOLD. You exercise no individual judgment as to the price you charged for your product, then, in a situation?

Mr. RANDALL. Well, I think that is about what it amounts to; yes, sir.

Mr. ARNOLD. And if the price of the raw material went down the price of the finished product actually went up due to that situation?

Mr. RANDALL. I don't know that that condition existed.

Mr. ARNOLD. In other words, the situation is such that you can't pay any attention to the price of the raw material in fixing the prices.

Mr. RANDALL. Of course, as Mr. Cox first stated, the industry is one of price leadership, and a small company like ours, making less than 1½ percent of the total, we have to follow, and I think we have a statement of our price policy here which would perhaps clear that up a little.

Mr. ARNOLD. When you say you have to follow, you don't mean anybody told you you had to follow?

Mr. RANDALL. No, sir; I don't mean that at all.

Mr. ARNOLD. But you have a feeling that something might happen if you didn't?

Mr. RANDALL. I don't know what would happen.

Mr. COX. You don't want to find out, do you?

The CHAIRMAN. Well, as a matter of fact, Mr. Randall, if The American Brass Co. raised the price would the Brass Co. consult you about raising it?

Mr. RANDALL. No, sir; not at all.

The CHAIRMAN. You would, however, follow them without exercising any independent judgment as to whether or not it was desirable.

Mr. RANDALL. That is correct.

The CHAIRMAN. Suppose The American Brass Co. raises its price, but you are satisfied with your output and with the profit that you are making at the old price. Why is it necessary for you to increase your price to your customers, who are already paying you a price sufficient to give you a profit that is satisfactory to you?

Mr. RANDALL. I don't know that it is necessary; as a practical matter, if we didn't raise our prices with The American Brass Co. or other companies, whoever it might be, would put their price back to where it was.

The CHAIRMAN. That wouldn't bother you, because you were making a profit at the old price.

Mr. RANDALL. Not on beryllium copper.

The CHAIRMAN. Why do you do it?

Mr. RANDALL. It is the custom of the industry, at least of the smaller companies, to do that.

The CHAIRMAN. And other small companies do the same thing?

Mr. RANDALL. Yes, sir.

The CHAIRMAN. Is there any reason outside of custom for it?

Mr. RANDALL. No, sir.

The CHAIRMAN. Isn't it likely to reduce the amount of business that you can obtain?

Mr. RANDALL. I don't think so.

The CHAIRMAN. Well, if a competitor raises the price for an identical product, isn't it likely to believe that the producer who does not raise the price would get more business?

Mr. RANDALL. I imagine it would, if the other price stayed where it had been raised to. I think that might work out over a period of time.

The CHAIRMAN. You see, I am trying to get some understanding of the exact reasons why this price policy is followed, and it is not an answer—understand me, I am not criticizing your answer—that carries conviction merely to say it is the custom of the industry. There is a reason for customs. What, in your opinion, is the reason for this custom to follow the leader?

Mr. RANDALL. Well, of course, that is a custom which has been prevalent, I think, in the industry for many, many years prior to my entry into it.

The CHAIRMAN. Oh, yes; we hear a lot about price leadership, but I am trying to get the picture of this practice as you see it, and why you follow it.

Mr. RANDALL. Well, I don't think I have ever given the matter very much consideration. We simply, when the new prices come out, print them just as they are. We don't give the matter any consideration. The prices are published and we print those prices.

The CHAIRMAN. Is there any sort of compulsion, moral or otherwise?

Mr. RANDALL. Absolutely none.

The CHAIRMAN. Do you think it is a good practice?

Mr. RANDALL. Well, I have never given the subject very much consideration.

The CHAIRMAN. Now, of course, it is one of the most important subjects in your business.

Mr. RANDALL. Yes; it is, of course.

The CHAIRMAN. The price that you get for your product.

Mr. RANDALL. I can't answer that question. I don't know whether it is a good practice or whether it isn't a good practice. I know that it has been the custom of the industry for years on end, and I know that is what we do, that's all.

The CHAIRMAN. A moment ago, in response to either Mr. Cox's question or my question, you answered that if you did not follow the price up, then The American Brass Co. or some other company would come down again.

Mr. RANDALL. I don't think I said they would. I said they probably would or they might. I don't know what they would do.

The CHAIRMAN. Then I made the comment that that would not be a disturbing result, because it would mean merely the restoration of the old price. I could imagine, however, that you might start a price war, and that the other companies might go below you. Is there a possibility that that is what you have in mind?

Mr. RANDALL. I didn't have it in mind until this moment. That is a possibility: yes.

The CHAIRMAN. So you want the committee to understand that so far as you and your company are concerned, this price-leadership question is one to which you have never given any real consideration, and you have boosted your prices along with The American Brass Co. just as a matter of custom?

Mr. RANDALL. Yes.

Of course, you must take into consideration that those prices, when they are raised or put down, there is usually a good reason for it.

In other words, the price of copper has gone up or gone down, or something of that kind.

Mr. ARNOLD. Well, in that respect, if I interpret these charts rightly, the reason for raising of the price was due to the lowering of the price of the raw material. It would seem to follow from the charts, unless I misinterpret them.

Mr. RANDALL. You are talking about beryllium now. I was speaking of the general price of copper processed.

Mr. ARNOLD. There wasn't any economic reason for the price raise at all that you know of, was there?

Mr. RANDALL. I think the production of beryllium was particularly at that time very much in its infancy, and I don't think that the mills knew what their costs are. I think a big increase that took place, whenever that was, was due to the checking of costs on certain rod and wire items which proved to be very expensive to manufacture.

Mr. ARNOLD. Yes; but if this policy is continued, you will continue to follow The American Brass regardless of what your costs are, won't you, so that won't be an element in the picture?

Mr. RANDALL. Of course, to be perfectly frank, on that subject we don't know what our costs are on beryllium.

Mr. ARNOLD. It wouldn't make any difference if you did, so far as the present prices are concerned, would it?

Mr. RANDALL. No, sir; I don't think it would.

Mr. ARNOLD. In other words, there is a situation here where there is a lot of competitors and no competition.

Mr. RANDALL. Well, we simply, as I said before, follow the prices that are published, and that is what we have been doing for a good many years.

Mr. Cox. You spoke a moment ago of a statement which you had given us with respect to price policy. Is this what you had in mind, Mr. Randall?

Mr. RANDALL. Yes.

Mr. Cox. That statement reads as follows:

The price schedules issued by the Riverside Metal Co. are contingent upon the prices published by the larger units of the industry. From time to time these larger units publish their scale of prices, and our company has no alternative except to meet such published prices in order to compete.

I think I would like to offer that.

(The document referred to was marked "Exhibit No. 485" and is included in the appendix on p. 2285.)

Mr. Cox. Mr. Randall, I think just to make the record clear we should perhaps explain again that $1\frac{1}{2}$ percent of the business which you say your company controls, or less than $1\frac{1}{2}$ percent, is not merely the beryllium alloy but all of the alloys which you sell.

Mr. RANDALL. That is correct.

Mr. Cox. And this system of price leadership which you have been describing is a system which applies not only to the price of the fabricated product made of the beryllium alloy, but all fabricated products?

Mr. RANDALL. Yes.

The CHAIRMAN. May I ask what this exhibit is [referring to "Exhibit No. 485"]? My attention was diverted.

Mr. Cox. That is a statement of Mr. Randall's price policy, which, I understand, he prepared. We asked him for it in the form of a question, and that statement was given to us in response.

The CHAIRMAN. This is not a statement that is issued to your customers?

Mr. RANDALL. Oh, no.

The CHAIRMAN. It was merely in response to the request of the Department of Justice, who requested that you prepare this statement?

Mr. RANDALL. That is correct.

The CHAIRMAN. Do your customers understand that this is your policy?

Mr. RANDALL. I don't know whether they do or not. When we mail out price lists they all get the prices from different companies. In other words, they would have the same price list from us as they would from anyone else.

Mr. CHAIRMAN. There is a very interesting statement or clause in this statement. It reads as follows:

And our company has no alternative except to meet such published prices in order to compete.

Now how do you explain that when the raise is up, when the price is raised?

Mr. RANDALL. Well, we feel that we have to follow the prices published by the bigger companies. When I say "no alternative," perhaps that is too strong a statement. We feel we have no alternative, that we must keep our prices at the same price as the bigger companies. I think perhaps "no alternative" may be a little strong statement.

The CHAIRMAN. It is suggested by one of the members of the committee that the word "not" should be inserted before the verb "to compete."

Mr. Cox. Mr. Randall, do you recall talking to Mr. Gahagan in August 1937 about the price of the master alloy and the price of the fabricated product?

Mr. RANDALL. No; I do not.

Mr. Cox. We have here a memorandum which the Department took from Mr. Gahagan's file, dated August 30, 1937, and entitled, "Memorandum of conversation with Mr. Randall, of Riverside Metal Co." This memorandum, which I shall show you in a moment, Mr. Randall, purports to contain a report of a discussion which Mr. Gahagan had with you with respect to the price of beryllium, and in the first paragraph this statement occurs:

He—

Referring, I assume, to you—

stated that he felt the attitude of the American Brass Co. was uncalled for, and that they should reduce the price of beryllium copper alloys, but that he did not dare take such a step himself, as American Brass were too strong and could make it uncomfortable for him in other directions.

Do you remember making that statement to Mr. Gahagan?

Mr. RANDALL. No; I do not. I'm sorry, I do not.

Mr. ARNOLD. You might have made it, might you not?

Mr. RANDALL. It is quite possible. I don't recall.

Mr. Cox. Mr. Randall, I think for the time being I will excuse you, if you don't mind staying around a little while. There may be some other questions.

I should now like to call Mr. Montague and Mr. Judd, from The American Brass Co., and Mr. Coe, if he is here. I think we might swear all three of them.

The CHAIRMAN. Do you and each of you solemnly swear the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. MONTAGUE. I do.

Mr. JUDD. I do.

Mr. COE. I do.

**TESTIMONY OF JOHN A. COE, JR., GENERAL SALES MANAGER,
THE AMERICAN BRASS CO., WATERBURY, CONN.**

Mr. COX. What is your position with The American Brass Co.?

Mr. COE. General sales manager, The American Brass Co.

Mr. COX. What is the nature of the business of The American Brass Co.?

Mr. COE. The American Brass Co. is engaged in the production of copper, brass, bronze, and nickel silver in wrought forms, including sheet, wire, rods, and tubes, and other fabricated forms.

Mr. COX. What is the capitalization of the company?

Mr. COE. The American Brass Co. is a wholly owned fabricating subsidiary of the Anaconda Copper Mining Co.

Mr. COX. Can you tell us what the capitalization of the company is?

Mr. COE. I do not know what it is.

Mr. COX. You heard Mr. Randall testify that his company did less than 1½ percent of the business in which he was engaged. Can you give us any approximate figure as to the percentage of the business which your company does.

Mr. COE. Approximately 25 percent.

The CHAIRMAN. What products do you include?

Mr. COE. All products of the kind.

Mr. COX. Is there any term which can be used as a short term to describe the particular business?

Mr. COE. I don't understand your question. We call it the fabricating industry of brass and copper alloys.

Mr. COX. What percentage of the business done by the company is the fabrication of phosphor bronze?

Mr. COE. I can't give you those figures without referring to the record.

Mr. COX. It has been suggested to us at one time, I think by some representative of your company, that it was about 10 percent. Do you think that is out of line?

Mr. COE. It would not be more than 10 percent on phosphor bronze.¹

Mr. COX. You also make certain products of the beryllium copper, do you not?

Mr. COE. We do.

Mr. COX. Sheet, wire, rod.

Mr. COE. And tubes.

¹Mr. Coe, later in the day, corrected this figure. See p. 2117, *infra*.

Mr. Cox. Where do you purchase the master alloys that you use?

Mr. COE. We have purchased the master alloy from two sources of supply, from Gahagan's company and also from the Brush Beryllium Co.

Mr. Cox. I have some questions now that I think I should like to ask Mr. Judd and Mr. Montague. Perhaps I might begin with Mr. Montague. Mr. Montague, will you tell us what your position with the company is?

TESTIMONY OF H. T. MONTAGUE, PURCHASING AGENT, THE AMERICAN BRASS CO., WATERBURY, CONN.

Mr. MONTAGUE. Agent for purchases and transportation.

Mr. Cox. As such is it a part of your duties to arrange for the purchase of the master alloy?

Mr. MONTAGUE. That is correct; yes, sir.

Mr. Cox. Mr. Montague, do you have any opinion as to whether a decrease in the price of beryllium would serve to stimulate demand and increase volume?

Mr. MONTAGUE. I don't know. I am not in the sales department, not in touch with the trade.

Mr. Cox. Well, you have expressed an opinion on that subject from time to time, have you not?

Mr. MONTAGUE. I have been enthusiastic at times, I think.

Mr. Cox. For example, I show you a letter which you wrote on May 10, 1933, to the Brush Beryllium Co. That is a photostatic copy of your letter, isn't it?

Mr. MONTAGUE. I presume it is. I don't know.

Mr. Cox. Do you have any doubts about it at all?

Mr. MONTAGUE. No; I wouldn't know. I think it would be.

Mr. Cox. You think it is your letter?

Mr. MONTAGUE. Yes; signed "Agent for Purchases."

INCREASE IN SALES VOLUME PREDICTED WITH REDUCTION IN PRICE

Mr. Cox. In this letter you say among other things:

Up to the present time, we have been ordering in 1-ton lots of the so-called master alloy, containing roughly 12½ percent copper, and these orders have been fairly regular and should with natural development increase, and would of course rapidly increase were we able to reduce the price on our product, which is only possible through obtaining a lower price on the beryllium master alloy.

Mr. MONTAGUE. That was my opinion at that time, my personal opinion.

Mr. Cox. I should like to offer that letter, if I may.

The CHAIRMAN. It may be received.

(The letter referred to was marked "Exhibit No. 486" and is included in the appendix on p. 2286.)

Mr. Cox. Again I call your attention to a letter which you wrote to Mr. C. B. Sawyer, of the Brush Beryllium Co., dated November 2, 1934, in which you say in the fourth paragraph:

Naturally our desire is to reduce the present price of \$25 per pound of beryllium content so that the use of this product may be extended further than at the present time. There is no question in our minds but that a reduction in price would greatly stimulate the demand.

That, too, is your opinion at that time?

Mr. MONTAGUE. My opinion.

Mr. COX. I should like to introduce that letter also.

The CHAIRMAN. It may be received.

(The letter referred to was marked "Exhibit No. 487" and is included in the appendix on p. 2286.)

Mr. COX. Again, on November 12, 1934, you wrote a letter to Mr. Sawyer in which you said:

I still would reiterate what I said to you the last time you were here, that a reduction in price would undoubtedly greatly increase the demand.

That, too, was your opinion at that time?

Mr. MONTAGUE. That was all personal understanding; I did not represent the company.

The CHAIRMAN. It may be received.

(The letter referred to was marked "Exhibit No. 488" and is included in the appendix on p. 2287.)

Mr. COX. As a matter of fact, that has been your personal opinion right along, has it not?

Mr. MONTAGUE. Yes; I think it has been nearly everybody's.

TESTIMONY OF CLARK S. JUDD, VICE PRESIDENT IN CHARGE OF MANUFACTURING, THE AMERICAN BRASS CO., WATERBURY, CONN.

Mr. COX. Mr. Judd, how do you feel about it? Is a reduction in price desirable in order to stimulate demand and increase volume?

Mr. JUDD. If you can sustain it—what I mean to say is, if you don't lose money on it.

Mr. COX. But you think as a means of stimulating demand that is probably—

Mr. JUDD (interposing). As a general principle I must agree to it.

Mr. COX. Would you agree to it with respect to beryllium?

Mr. JUDD. Yes; as a general principle.

Mr. COX. Is this typewritten sheet which I am about to show you a correct copy of your prices for beryllium copper beginning June 15, 1932, and continuing to April 20, 1939? I believe that this was one you gave us, but I would like to have you look at it.

Mr. COE. I believe this is a copy of the schedule we gave you. I haven't checked it in detail.

Mr. COX. Subject to check, if you wish to check it, I should like to offer this price schedule for the record.

The CHAIRMAN. The schedule may be received.

(The schedule referred to was marked "Exhibit No. 489" and is included in the appendix on p. 2287.)

Mr. COX. I should also like to offer this chart which has been prepared by the Department on the basis of the price list that has just been admitted.

The CHAIRMAN. The chart may be received.

(The chart referred to was marked "Exhibit No. 490" and is included in the appendix on p. 2289.)

Mr. COX. Mr. Judd, to revert a moment the question which I was asking you a moment ago, would you agree that if any decrease in the price of the master alloy was to have any effect in stimulating demand

in the industry, that price decrease would have to be reflected in a decrease in price of the fabricated product?

Mr. JUDD. Some of it.

Mr. Cox. But a decrease in price of the master alloy with no decrease in price of the fabricated product, in your opinion, wouldn't have any effect?

Mr. JUDD. No; it wouldn't.

QUESTION OF PRICE LEADERSHIP

Mr. Cox. You heard Mr. Randall's testimony with respect to the system of price leadership which prevails.

Mr. COE. Yes.

Mr. Cox. Would you agree with his description of that system insofar as it denoted your company as the price leader?

Mr. COE. I would not agree with that statement.

Mr. Cox. You wouldn't agree with the statement?

Mr. COE. No.

Mr. Cox. In other words, it is your position that your company is not the price leader in the industry?

Mr. COE. We are not the price leader of the industry.

Mr. Cox. It is a fact, is it not, that your prices for beryllium copper have been substantially the same as those of Mr. Randall for a period between 1934 and the present time?

Mr. COE. So far as I know, they have been practically the same.

Mr. Cox. Practically the same prices. Now, you say you are not the price leader. Is there any price leader in the industry?

Mr. COE. There is none.

Mr. Cox. Then how do you explain the fact that the prices are the same?

Mr. COE. We publish our prices; they are public information; anybody who wishes to, may follow those prices at his own discretion.

Mr. ARNOLD. They all wish to apparently, don't they?

Mr. COE. They do not, sir.

Mr. ARNOLD. You mean they have not been following those prices?

Mr. COE. On our product they have not, sir.

Mr. ARNOLD. I got the impression, I may be wrong, that the prices of competitors and your prices have been substantially identical.

Mr. COE. To some extent they have been identical. There are always variations in many prices.

Mr. ARNOLD. You said that anyone who wished to might follow. Some of them certainly wish to.

Mr. COE. Some of them do wish to.

Mr. ARNOLD. And some of them did follow.

Mr. COE. That is correct.

Mr. ARNOLD. And therefore to that extent you have been the leader.

Mr. COE. To some extent we have been the leader in that we have put out our prices. However, others have put out prices and we have followed them at times.

Mr. ARNOLD. What other companies would you put in the position of price leadership aside from your own?

Mr. COE. Practically any member of the industry.

Mr. Cox. Including Mr. Randall?

Mr. COE. Including Mr. Randall.

Mr. ARNOLD. Have you ever followed his prices?

Mr. COE. I cannot answer that question without looking back.

Mr. ARNOLD. Could you give us a list of the prices which you have followed?

Mr. COE. In times past with various price changes we have followed entirely the prices put out by others.

Mr. ARNOLD. Could you give us a list of the times and instances that you have done that?

Mr. COE. They have been too numerous to remember. I do not recall those.

Mr. ARNOLD. Could you recall any of them—I mean not now, but a little later—typical instances?

Mr. COE. I could not recall them at this time. I know this, that when copper has changed, prices have gone up or down at times, some companies have put out prices and we have followed them to some extent but not in all respects.

Mr. ARNOLD. I take it that the prices are fixed generally by someone following someone else, and that sometimes they follow you and other times you follow others.

Mr. COE. May I ask what you mean by “fixed”? We publish our prices; they become our prices; they are public information. In that way the prices of The American Brass Co. are fixed by us.

Mr. ARNOLD. Then you understand what we mean by “fixed” and I repeat my question: Is it true that prices are fixed in this industry either by someone following you or by your following others?

Mr. COE. Not in all respects. Many times we do not follow others in all respects; many times they do not follow us in all respects.

Mr. ARNOLD. But there is a following on the part of the various companies in the industry?

Mr. COE. A general following; yes, sir.

The CHAIRMAN. Not that you impose your idea as to what the price should be upon anybody else, or that anybody else imposes it upon you, but when any company makes a change in price, the tendency is for all to follow that change?

Mr. COE. That is the tendency.

The CHAIRMAN. And how long has that been the system?

Mr. COE. As far back as I have been with the company that has been in vogue; water seeking its own level.

The CHAIRMAN. Now do these changes reflect the actual cost of production of the companies which follow?

Mr. COE. I do not know that. I cannot answer for other companies, sir.

The CHAIRMAN. Well, you are the chief salesman of The American Brass Co?

Mr. COE. I have that title.

The CHAIRMAN. Well, this matter of prices is your particular job, isn't it?

Mr. COE. That is correct.

The CHAIRMAN. Now how do you fix the prices? I mean, let's drop the word “fix”. How do you make the price?

Mr. COE. How do we determine our prices?

The CHAIRMAN. What factors go into the determination of the price?

Mr. COE. The cost of our raw metals going into the alloys, plus our manufacturing differentials. The latter is determined by our price committee.

The CHAIRMAN. And if the price of the raw material should go down, then one would naturally expect the price of the finished product to go down, unless there was some countervailing change in some other factor?

Mr. COE. There are other factors to be taken into consideration; yes, sir.

The CHAIRMAN. Well, now, would you say that the price fluctuates in the same degree that the price of these countervailing or these other factors fluctuate?

Mr. COE. That is a difficult question to answer. I don't quite know what you mean by that.

The CHAIRMAN. Well, I tried to make it simple. The price of the finished product would naturally, one would suppose, depend upon the cost of the various factors which go into making the finished product?

Mr. COE. That is correct.

The CHAIRMAN. Well, now, do you want the committee to understand that always the price of the finished product is determined by these other factors and by no other consideration?

Mr. COE. The price is determined by the price of raw materials going into those products, plus our cost of manufacturing.

The CHAIRMAN. Yes; those are the other factors?

Mr. COE. Those are the other factors.

The CHAIRMAN. And there is no other consideration that goes into the determination of the price?

Mr. COE. That is correct.

The CHAIRMAN. And how about this leadership, why do you follow somebody else's lead sometimes?

Mr. COE. We can get no more for our product than other people can get for theirs; will charge for theirs.

The CHAIRMAN. Here is another outfit which is supposedly competing with you, which is not as efficient as you are, and therefore which finds for example that there is a much heavier plant charge, let us say; therefore, it is not able to produce this finished product at as low a price as you, and because it doesn't produce it at as low a price as you, it has to raise the price, but according to your testimony when such a company raises the price, then you follow and raise your price, although your costs have not changed?

Mr. COE. We have not necessarily raised our price.

The CHAIRMAN. Oh, now, let's drop the word "necessarily." You have just said that you have done that and that other companies follow you occasionally. Now, Mr. Coe, we are merely trying to get the facts here; we are not laying the basis for a case against The American Brass Co. I am trying to get through my mind this picture of price leadership in industry.

Now, you have told us as explicitly as it can be told that in some cases other companies in the same business as you follow the price that you fix, and you have told us how you determine that price, and then you say in other instances you followed the price of other companies, and when you do that necessarily you do it upon factors that are not reflected in your business, but on factors that are reflected in the business of the company which raises the price. Now why do you do it?

Mr. COE. We can get as much for our product as any competitor can get for his product.

The CHAIRMAN. Now we are getting somewhere. If some other company raises the price and is getting that price, then you think you had better come up and equalize it?

Mr. COE. I feel our product is as good as any made by the industry.

The CHAIRMAN. It may be better.

Mr. COE. I hope it is.

The CHAIRMAN. But the point in determining the price thing is that you base it not upon the actual costs of manufacture in your plant, but upon the highest charge that anybody in the industry makes by and large, isn't that the effect of this price leadership policy?

Mr. COE. It is usually predicated on the lowest price that anybody makes.

The CHAIRMAN. Well, of course, there was an old familiar saying that the price that companies charge is what the traffic will bear. Now isn't that the motto which guides those who follow the practice of price leadership?

Mr. COE. It depends on what you mean by "traffic." Of course we have to compete with many other things besides brass and copper.

The CHAIRMAN. Well, would you say that The American Brass Co. puts its product out at the lowest possible price, bearing in mind all of these factors of cost?

Mr. COE. It is necessary when we get our products to the ultimate consumer as low as we reasonably can, and still at a fair margin of profit, in order that we will not be—that our products will not be supplanted by substitutes.

The CHAIRMAN. But under this plan of price leadership, is it not inevitable that the tendency would be to raise the price so as to cover the cost of the less efficient member of the industry?

Mr. COE. The tendency has been just the opposite. The tendency has been to lower the price.

The CHAIRMAN. I don't read these charts aright, then. Here is a chart with the price of beryllium down; the price of every product up.

Mr. COE. That is correct.

The CHAIRMAN. While they are going down?

Mr. COE. That is correct.

The CHAIRMAN. How do you explain that?

Mr. COE. In 1932 we started the production of beryllium-copper; we had had no experience in the manufacture of that alloy; it is a so-called refractory alloy, difficult to produce in our mills. As I said, we had had no cost experience. Therefore the prices to the consuming public we put out in 1932 were based entirely on estimates. Since that time we have taken various costs on this material and have found that we have lost money consistently since 1932 on this product. Therefore, we must get more return to keep going on beryllium-copper. We have suffered an average loss on beryllium-copper products for every year since we started of between ten and twenty thousand dollars.

The CHAIRMAN. Well, we had testimony a little while ago from Mr. Randall that he feels compelled to raise his price when you raise your price, although his costs have not been altered?

Mr. COE. I don't know what his costs are; I have no way of knowing.

The CHAIRMAN. Of course you don't, and I am not asking you, but that was his testimony. The effect of that, of course, is just what I have said, that the price comes up to the consumer. Now, of course, if when you have raised your price and he doesn't, the inference would be—I mean that he doesn't have to, though he follows you—the inference would be that his cost of production was less than your cost of production, but you wouldn't want to leave that inference with the committee?

Mr. COE. It may be. I have no way of knowing what his costs are.

Mr. ARNOLD. Would you mind giving us a list of the instances—not now—that you can recall where you have followed the price of others?

Mr. COE. We can get very fair samples of that for you.¹

Mr. COX. Of course it is true, isn't it, Mr. Coe, that you and Mr. Randall's company quite regularly exchange information with respect to the prices that you are charging?

Mr. COE. We do exchange information—on our current prices. Our prices are published and therefore are public information.

Mr. COX. Well, in addition to whatever information Mr. Randall might gain from public sources, you write letters back and forth, too, about your prices, don't you?

Mr. COE. We send our published prices.

Mr. COX. Well, you sometimes go a little bit beyond that and discuss respective price changes?

Mr. COE. We do not, sir.

Mr. COX. I should like to recall Mr. Randall for a moment at this point. You gentlemen just stay here; we will get another chair for him.

Mr. RANDALL. Mr. COX, can I correct a statement that I made?

Mr. COX. Certainly, as far as I am concerned.

Mr. RANDALL. The statement was made by the chairman that in my testimony I made some statement that our costs of beryllium products had not gone up. Is that correct?

The CHAIRMAN. You misunderstood me. I said that your testimony was to the effect that you would raise your price of the finished product in following the leadership of another company, regardless of the costs in your own company.

BERYLLIUM PRICES DETERMINED BY "CUSTOM"

Mr. RANDALL. Well, I might qualify that statement by saying this, that in a small company such as ours I must confess that our costs are very sketchy. We have a cost department I think of three people. We follow the prices set by the bigger companies and pray that we will make a profit.

The CHAIRMAN. Now, Mr. Randall, let's assume a case, a case of following the leader which you yourself have described. You are selling your product and you are satisfied with the price, and you

¹ In a letter dated September 19, 1939, addressed to Mr. Arnold, Mr. Coe submitted "a list showing dates and products setting forth instances where companies competing with The American Brass Co. have issued prices which were at levels other than those in effect and published by The American Brass Co." The documents were introduced during hearings held September 25, 1939, marked "Exhibit No. 1171," and are included in the appendix on p. 2304.

yourself have no thought of raising the price, and along comes The American Brass Co. and raises the price. You follow it?

Mr. RANDALL. Yes, sir.

The CHAIRMAN. Now, why do you follow it?

Mr. RANDALL. Well, because I think they probably know what they are doing; they probably know what their costs are a lot better than I do.

The CHAIRMAN. Do they know your costs better than you do?

Mr. RANDALL. No, sir.

The CHAIRMAN. And if you were satisfied with the profit that you were getting at the price that your consumers were paying, why should you follow their leadership?

Mr. RANDALL. Well, because it is the custom of the industry. We have always done it.

The CHAIRMAN. That is exactly what I have said. It is an old Spanish custom, in other words.

Mr. ARNOLD. The American Brass Co. representative testified that they sometimes followed other people. Do you ever follow other people than The American Brass?

Mr. RANDALL. I don't recall that we ever have, sir; no.

COOPERATION BETWEEN FIRMS IN PRICE FIXING OF BERYLLIUM PRODUCTS

Mr. Cox. Mr. Randall, I hand you a document and ask you if it is a copy of a letter which you addressed to Mr. Frank Weaver, of The American Brass Co., under date of May 3, 1933.

Mr. RANDALL. I think that is correct.

Mr. Cox. The letter reads as follows:

Mr. FRANK WEAVER,

The American Brass Co., Waterbury, Conn.

DEAR FRANK: I am assuming that if you make any changes in the base price of beryllium copper you will not neglect to notify us of any such changes.

I should like to offer that in evidence.

The CHAIRMAN. It may be received.

(The letter referred to was marked "Exhibit No. 491" and is included in the appendix on p. 2289.)

Mr. Cox. Now you received an answer to that letter, did you not. signed by Mr. Coe?

Mr. RANDALL. I think that is correct.

Mr. Cox. You remember this letter, Mr. Coe?

Mr. COE. I do.

Mr. Cox. That is the letter you sent Mr. Randall?

Mr. COE. It is.

Mr. Cox. This letter reads as follows:

MAY 5, 1933.

Mr. H. LEE RANDALL,

President, the Riverside Metal Co., Riverside, N. J.

DEAR LEE: Mr. Weaver has asked me to acknowledge your letter of May 3 regarding the published base price on beryllium copper. For your information, based on the price change of May 3, published price of beryllium copper sheet metal is 85¼ cents per pound; wire 88¼ cents; rods, 88¼ cents; tube, 93¼ cents.

All of the above are on a hundred-pound items basis, with triple the brass small quantity extras on less than 100 pounds.

If we were to quote you on items of 1,000 pounds per size, we should reduce the above base prices by 3 cents per pound.

Extras for size are the same as net phosphor-bronze extras, as shown in our catalog.

We trust this is satisfactory.

(Signed) Mr. Coe.

I should like to offer that letter.

The CHAIRMAN. The letter may be received.

(The letter was marked "Exhibit No. 492" and is included in the appendix on p. 2290.)

Mr. Cox. And then, Mr. Randall, you replied to that letter under date of May 9, 1933, did you not?

Mr. RANDALL. Yes, sir.

Mr. Cox. The reply reads as follows:

Mr. JOHN A. COE, JR.,
The American Brass Co.,
Waterbury, Conn.

DEAR JOHN: Thank you for your letter of May 5, relative to change in price of beryllium-copper products.

We understand you will keep in touch with any changes which may be made in this commodity.

I should like to offer that letter.

The CHAIRMAN. That letter may be received.

(The letter referred to was marked "Exhibit No. 493," and is included in the appendix on p. 2290.)

Mr. Cox. Mr. Randall, I am going to hand you a photostat and ask you if this is a photostat of a letter which you addressed under date of November 8, 1934, to Mr. H. L. Kilborn, of The American Brass Co.?

Mr. RANDALL. Yes, sir.

Mr. Cox. This letter reads as follows:

Mr. H. L. KILBORN,
American Brass Co.,
Waterbury, Conn.

DEAR HI: We have your letter of November 5 and it is quite agreeable to us to await your action in connection with price on beryllium-copper hexagon rod.

We have appreciated, of course, that the manufacture of items in beryllium copper is not at all inexpensive and we only wanted to place ourselves in a position to be able to figure on such items as we can at the present time manufacture.

We will leave it up to you to let us know when you care to make any change in your present set-up.

Mr. RANDALL. May I see that once more? There seems to be a typographical error. I don't quite get this last paragraph. That I think should read—that doesn't make sense there. It should read "cannot make at the present time."

Mr. Cox. I see, so that the second paragraph should read:

We have appreciated, of course, that the manufacture of items in beryllium-copper is not at all inexpensive and we only wanted to place ourselves in a position to be able to figure on such items as we cannot at the present time manufacture.

Mr. RANDALL. Yes.

Mr. Cox. I should like to offer this letter, if I may.

The CHAIRMAN. The letter may be received.

(The letter as read and corrected was marked "Exhibit No. 494," and is included in the appendix on p. 2290.)

The CHAIRMAN. Did you mark that change here?

Mr. Cox. I haven't marked it on the letter; I read it into the record.

The CHAIRMAN. Let me suggest that you mark it on this.

Mr. Cox. The letter is now offered as corrected by Mr. Randall.

The CHAIRMAN. It will be received.

Mr. Cox. Mr. Randall, I hand you a photostated copy of a letter and ask you if it is a letter which you addressed under date of October 4, 1935, to Mr. Judd, of The American Brass Co.?

Mr. RANDALL. Yes, sir.

Mr. Cox. Can you gentlemen tell me whose handwriting that is on the bottom?

Mr. JUDD. Mr. Pendleton's.

Mr. Cox. Who is Mr. Pendleton?

Mr. COE. The assistant vice president of one of our branches.

Mr. Cox. This letter reads as follows:

Mr. CLARK JUDD,

The American Brass Co., Waterbury, Conn.

DEAR CLARK: It is my understanding that beryllium master alloy is now \$30 per pound for contained beryllium, and according to our figures this increases the alloy cost of the 2¼-percent beryllium by 0.113 per pound over what it would be at \$25 per pound for contained beryllium.

Under the circumstances, do you not think some thought should be given to the matter of base prices?

Very truly yours,

(Signed) Mr. RANDALL, *President.*

Then there is a handwritten note on the bottom of the letter which I am just informed was written by Mr. Pendleton, which reads as follows:

We are paying Beryllium Corporation \$30 and another source \$23—average of \$26.50. With early prospects of \$20 or less, we should be reducing before long, instead of advancing. Perhaps Randall should be advised of situation.

I should like to offer that letter.

The CHAIRMAN. The letter may be received.

(The letter referred to was marked "Exhibit No. 495" and is included in the appendix on p. 2291.)

Representative REECE. Would it interfere for me to ask a question in reference to the footnote to which you read, unless it is your intention to develop it anyway? It is stated there by Mr. Pendleton that you are paying \$30 to the Beryllium Corporation, \$23, I believe, to the Brush Corporation, and you expect further reductions at an early date. On what is that expectation based?

Mr. MONTAGUE. I would say there is a great deal of talk about reducing prices.

Representative REECE. By whom?

Mr. MONTAGUE. By most everybody that came in. We had all kinds of people coming in; some of them didn't produce beryllium.

Representative REECE. Mr. Coe, I believe, testified earlier that The American Brass Co. got its beryllium from two sources only?

Mr. MONTAGUE. That is correct.

Representative REECE. Were you in touch with other producers of beryllium also?

Mr. MONTAGUE. Yes, sir; that is with respect of people who claimed they could make it.

Representative REECE. But what company did make the next reduction in beryllium?

Mr. MONTAGUE. Brush Beryllium.

Representative REECE. You say that your feeling that there was a reduction impending was due to having heard a great deal of talk to that effect?

Mr. MONTAGUE. Yes.

Representative REECE. Now, Brush seemed to have been the one who made the next reduction?

Mr. MONTAGUE. Yes, sir.

Representative REECE. It is a little difficult to understand how these other companies would have been talking about it who didn't make a reduction until after Brush had taken the lead.

Mr. MONTAGUE. No; they came in, if you will pardon me a minute. These people came in and offered beryllium at all kinds of prices. We would ask for a sample and we wouldn't get it. One company did actually produce some beryllium.

Representative REECE. But you didn't regard the talk of those who do not produce beryllium; you didn't regard seriously as reflecting the probable cost of the product?

Mr. MONTAGUE. Not at that time; no; not at that time.

Representative REECE. Had you had any conversations with the Brush with reference to their costs or cost policy, price policy?

Mr. MONTAGUE. No; they may have told me, I don't remember. May have told me that they would like to reduce prices, or something of that sort; I don't remember.

Representative REECE. What are the relative amounts that The American Brass Co. buys from the Beryllium Corporation?

Mr. MONTAGUE. I haven't those—they are in your questionnaire.

Representative REECE. I haven't read the questionnaire. Approximately?

Mr. MONTAGUE. I think I have forgotten.

Mr. JUDD. 6,700 pounds, I believe, in 5 years from the Beryllium Corporation, and 8,200 pounds in a slightly less time from the Brush people.

Representative REECE. But slightly more from the Brush people?

Mr. JUDD. Yes; it works out that way.

Representative REECE. Brush made its reduction to which you referred in the last letter in 1938, reducing the price from \$23 to \$15. How soon after the reduction in price was made by Brush did you place your next order?

Mr. MONTAGUE. That order was placed—Brush's first price was \$25, then \$23, March 24, when we placed an order with Brush.

Representative REECE. What was the next preceding order that you placed?

Mr. MONTAGUE. I don't know.

Representative REECE. It had been some time since you had placed an order with Brush?

Mr. MONTAGUE. Yes; I think so.

Representative REECE. Was that a considerable order that you placed in March of this year?

Mr. MONTAGUE. No, sir; it was not; it was a small order.

Representative REECE. At the time when the price reduction was made by Brush in '38—

Mr. MONTAGUE (interposing). '39; March '39, not '38; they made no reduction in '38.

Representative REECE. I was misreading the brackets. What was your—can we ascertain what reduction was made in this chart? It would indicate that it was made probably along toward midyear; most midyear.

Did you have in the early part of '39 and do you have now considerable stocks of beryllium?

Mr. MONTAGUE. Yes, sir.

Mr. Cox. Since Congressman Reece has brought up that matter of price change in 1939, there is a question I might ask you about that. After that price change was made or announced by the Brush Beryllium Co., is it true that you gave some thought to the necessity or desirability of making a change in the price of your fabricated product?

Mr. COE. We gave considerable thought to it.

Mr. Cox. And in connection with that did you discuss those proposed changes with Mr. Randall?

Mr. COE. We did not discuss those proposed changes in any specific way.

Mr. Cox. I have here a photostatic copy of a letter which Mr. Montague wrote to Mr. Sawyer under date of March 1, 1939, and on the second page of that letter at the bottom of the page this statement occurs [reading from "Exhibit No. 498"]:

In the meantime we will have made up a tentative price schedule as mentioned heretofore and then make contact with Mr. Randall and lay the cards on the table with him. Our people feel very strongly that no move should be made, no publicity given to price until the matter has been thoroughly discussed with Mr. Randall.

This is your letter?

Mr. MONTAGUE. That is my letter.

Mr. Cox. This, as I understand it, was a statement that such discussions were to take place. Did they ever take place?

Mr. COE. I met Mr. Randall in New York. The purpose of that meeting was to find out from him what he thought the future of the beryllium copper industry was in his company. As stated previously, we have suffered a considerable loss, averaging \$10,000 to \$20,000 a year, on beryllium copper. From a sales standpoint it is very difficult to explain to executives why we should keep on taking a loss on any product like that unless there were going to be a much larger demand in the future. I couldn't see where there was going to be much of a demand unless the price of the finished product were drastically reduced to the ultimate consumer.

I did interview Mr. Randall in New York to see what he thought might be the future of the beryllium copper industry. At that time he told me his thought was exactly the same as ours, that unless the price of the finished product to the ultimate consumer could be drastically reduced, somewhere in the neighborhood of the phosphor-bronze range, he could not see any great demand for it in the future.

Mr. Cox. I am going to hand you another letter that Mr. Montague wrote to Mr. Sawyer, dated March 10, 1939.

The CHAIRMAN. Have you finished with this conversation?

Mr. COX. No. It relates to the conversation. Perhaps before I do that I should offer in evidence the first letter which I read a moment ago dated March 1, 1939.

The CHAIRMAN. The letter may be received.

(The letter referred to was marked "Exhibit No. 496," and is included in the appendix on p. 2291.)

Mr. COX. This next letter dated March 10, 1939, written by Mr. Montague to Mr. Sawyer, refers to the conference in New York which has been described by Mr. Coe. Will you examine the letter and read the two paragraphs that relate to the conference and tell me whether that is an actual description?

Mr. COE. That is not a correct description of that meeting.

Mr. COX. Is this part correct which I read now:

Mr. Randall opined that such a reduction should be passed on to the trade, but that all of it could not be passed on in view of the very heavy inventory of stock in works, scrap, and other metal which was on hand at the \$23 price.

Mr. COE. I do not recall Mr. Randall making such a statement.

Mr. COX. Do you recall whether you said that?

Mr. RANDALL. I certainly do not.

Mr. COX. Mr. Montague, this is your letter. Do you recall that statement?

Mr. MONTAGUE. I wasn't at the meeting.

Mr. COX. I see. You wrote this letter on the basis of the report you got from someone else. Is that correct?

Mr. MONTAGUE. Yes; that is correct; my impression of the meeting.

Mr. COX. You got the report from Mr. Pendleton or Mr. Coe?

Mr. MONTAGUE. I got it from Mr. Pendleton; that was my impression.

Mr. COX. From talking to Mr. Pendleton?

Mr. MONTAGUE. That is all. I was not at the meeting.

The CHAIRMAN. What is your best recollection now as to the correctness of the impression that you received from Mr. Pendleton?

Mr. MONTAGUE. Well, I don't know; I was very busy that day, if I remember. I went down and asked him if he had attended this meeting and he told me and I went on upstairs in my office. I wouldn't swear that—that was my impression.

The CHAIRMAN. Well, what is your impression now as to the correctness of your interpretation of what was reported to you at the time you wrote the letter?

Mr. MONTAGUE. I don't think it was correct.

The CHAIRMAN. You don't know?

Mr. MONTAGUE. No; I don't.

The CHAIRMAN. It is your belief that your letter was mistaken?

Mr. MONTAGUE. Yes, sir.

The CHAIRMAN. When did you acquire that belief?

Mr. MONTAGUE. Well, I acquired it now. As a matter of fact, I know that I was not at the meeting. I was passing—all I was passing on was my impression of what Mr. Pendleton said to me.

The CHAIRMAN. That is an important letter.

Mr. MONTAGUE. Yes, sir.

The CHAIRMAN. And it is not your practice to send out important letters of this kind without being fairly certain that they are based upon correct information?

Mr. MONTAGUE. I was passing on what you might call gossip to Dr. Sawyer for his information.

Mr. Cox. Now, I should like to read you the next sentence, both Mr. Coe and Mr. Montague:

A \$15 price for beryllium content would mean a reduction of 18 cents a pound on alloy value, and it is proposed tentatively to pass on 10 cents and hold the 8 cents until a good part of the present stock in works and other metal on hand is absorbed, when a further reduction would be considered. Mr. Randall, without committing himself, intimated that this would be satisfactory, but he wished to go back and look over his figures and then would advise us whether he would be agreeable to such a change.

Do you remember saying that, Mr. Randall?

Mr. RANDALL. No, sir; I do not.

Mr. Cox. Take both this statement and the one I read before. You are not quite prepared at this time to state definitely that you did not state that?

Mr. RANDALL. No; I am not prepared to state definitely.

Mr. Cox. So you may have said that?

Mr. RANDALL. Yes, sir.

Mr. Cox. Mr. Montague, is this also an impression you got from Mr. Pendleton?

Mr. MONTAGUE. As far as I know at the present time.

Mr. Cox. These prices, these figures which you used in here were figures which you got from Mr. Pendleton; is that correct?

Mr. MONTAGUE. Those were figures that were developed in another letter.

Mr. Cox. I am referring to the 10-cent figure and the 8-cent figure which were the two price-reduction figures.

Mr. MONTAGUE. Well, that was my impression.

Mr. Cox. Those were figures which you got from Mr. Pendleton; is that correct?

Mr. MONTAGUE. That was my impression.

Mr. Cox. Mr. Coe, is that statement a correct statement of everything that happened at this conference?

Mr. COE. That is not a correct statement.

Mr. Cox. Were the figures of 10 cents or 8 cents ever mentioned in that conference?

Mr. COE. Not by me; no, sir.

Mr. Cox. Were they mentioned by Mr. Randall?

Mr. COE. Not that I recall.

Mr. Cox. Were they mentioned by Mr. Pendleton?

Mr. COE. Not that I recall.

Mr. Cox. Do you think it is possible to account in any way for Mr. Montague's acquisition of those rather definite figures from Mr. Pendleton?

Mr. COE. I do.

Mr. Cox. How do you account for it?

Mr. COE. There was a meeting held in our office of those interested in beryllium in The American Brass Co. It was prior to this meeting with Mr. Randall. At that meeting we discussed the future of beryllium copper as we make it. We came to the conclusion that the only real future for beryllium copper, which in itself has merits, was to get the price to the ultimate consumer down. We then said, "if we

can buy the master alloy for some figure lower than \$23 per pound, what would be the result to us?"

Supposing the price were reduced to 19, or 17, or 15, or even 13 dollars, we didn't know what the price might be; that naturally would result in a lower mixture cost to us. We then debated in that meeting whether or not we would pass along to the ultimate consumer that entire saving on our mixture cost.

The CHAIRMAN. What meeting are you speaking of?

Mr. COE. A meeting held in our office.

Mr. Cox. A New York meeting?

Mr. COE. Not a New York meeting, just American Brass representatives present. As I say, we then debated whether we would pass along all or any part of this savings to the ultimate consumer. Going over our records, we have lost so much money on this in the past 6 years that it seems in some ways foolish to continue with it, even though the metal has merits. In that meeting we did say, supposing we reduced the price either 8 or 10 cents—I don't remember which—and put the balance of it into our manufacturing cost, that would more nearly permit us to break even on this. We also had to take into consideration a considerable amount of stock in works in our plant. Naturally the price (the mixture value of that stock in works) in our plants was based on \$23 master alloy price. If we reduced our prices, reduced the mixture value by 18 cents a pound, if we had a hundred thousand pounds in stock in works, that would mean an additional book loss of \$18,000 which is a considerable sum of money. I think that is where Mr. Montague got his impression of the 8 and 10 cents.

Mr. Cox. If that is correct and those figures were never mentioned at the New York conference, Mr. Coe, the statement in the letter that "Mr. Randall without committing himself intimated that this would be satisfactory but he wished to go back and look over his figures and then would advise us whether he would be agreeable to such a change" is just wrong?

Mr. COE. That is absolutely incorrect. I never expected to hear from Mr. Randall again on this subject.

Mr. Cox. Of course you did.

The CHAIRMAN. Was it immaterial to you what action he took?

Mr. COE. As we said before, we have to meet competition. We can get as much for our product as anybody else. We can't get any more.

The CHAIRMAN. But you say this statement in the letter is wrong, that it never should have been in the letter, it never happened, there was no such conversation between you and Mr. Randall, and you never expected to hear from Mr. Randall again.

Mr. COE. On this subject, no, sir.

The CHAIRMAN. So, on the basis of those statements, was it immaterial to you what action Randall took?

Mr. COE. For the time being, yes.

The CHAIRMAN. You didn't care?

Mr. COE. I didn't care what action he took.

Mr. Cox. But you did reduce the price on your fabricated product after these conferences?

Mr. COE. We did not.

Mr. COX. I was under the impression there had been a 1-cent reduction in the price of sheet.

Mr. COE. If there was, it was not due to a reduction in the price of beryllium.

The CHAIRMAN. Tell me, why did you have this conversation with Mr. Randall in the first place?

Mr. COE. I wanted to see Mr. Randall to see what he thought of the future of beryllium copper. He has had experience in producing it. We have had experience in producing it. We have produced only a very limited amount. It has never amounted to more than one-tenth of 1 percent of our production in any one year on a poundage basis. We have 200 salesmen canvassing the field. A good deal of their time naturally is spent in promoting new products. We have lost a considerable sum of money on beryllium. In my own mind I had come to the conclusion that we would have to get beryllium copper onto a paying basis, with the idea that there might be substantial volumes of it used in the future, making it worth while for us to continue beryllium copper; however, he has had as much experience, I presume, in beryllium copper as we have. I wanted to see whether his reaction to that was the same as ours.

The CHAIRMAN. The purpose of the meeting, then, was to exchange experience so that you could determine what would be a paying basis for the beryllium industry?

Mr. COE. No; that is not quite right.

The CHAIRMAN. Will the reporter please read Mr. Coe's previous reply?

(The reporter read Mr. Coe's reply and the chairman's question.)

Mr. COE. What "might" be a paying basis for the industry.

The CHAIRMAN. Ah, a difference between what "would" be and what "might" be.

Mr. COE. We don't know what a paying basis would be.

The CHAIRMAN. Did you exchange your experiences?

Mr. COE. We told him, just as I have told the committee, that we had lost a considerable sum of money and unless we could see some tremendous future in it we might consider giving up the manufacture of beryllium copper.

The CHAIRMAN. Then did he tell you anything?

Mr. COE. He said his experience had been the same as ours; that he was not optimistic about the future of beryllium copper unless the price to the ultimate consumer could come down more to the range of the phosphor bronzes.

The CHAIRMAN. Then there was some discussion about putting it on a paying basis?

Mr. COE. That is correct.

The CHAIRMAN. Did that discussion involve the prices which the consumer should pay?

Mr. COE. Only in this way. The price for the so-called phosphor bronzes, or those bronzes containing tin, is in the neighborhood of 30 to 40 cents a pound.

The CHAIRMAN. Did you give him any indication of what your opinion was of what a paying basis might be?

Mr. COE. I have no way of knowing what a paying basis might be.

The CHAIRMAN. I said your idea of what it might be.

Mr. COE. I did not.

The CHAIRMAN. But when you came back you gave your associates a very definite idea of what a paying basis might be.

Mr. COE. No, sir; I did not.

The CHAIRMAN. Did you not just explain in this letter, the accuracy of which you deny as being a correct interpretation of the conversation between yourself and Mr. Randall, as being a mistaken description of a conference that took place between you and some other members of The American Brass Co.?

Mr. COE. That is correct; that is a mistaken impression.

The CHAIRMAN. So that that is a correct interpretation, you wish this committee to understand, of a conference that took place among The American Brass Co. executives after the conversation with Randall?

Mr. COE. The conversation in The American Brass Co. took place before our conference with Mr. Randall.

The CHAIRMAN. Before? So that before you had your conference with Mr. Randall, you had this very definite idea of what the paying basis might be.

Mr. COE. No; I have no definite idea of what the paying basis would be.

The CHAIRMAN. I have adopted your word, not mine. I said "might" be. You had a very definite idea, did you not?

Mr. COE. I said that we couldn't make this a paying basis until—

The CHAIRMAN (interposing). Now, now, now—let's go back and begin all over again. Take this letter. You deny that this letter correctly represents a conversation between yourself and Mr. Randall, and in explaining how it happens to have been written by an important executive of your company, Mr. Montague, you say that it correctly represents a conversation which took place among executives of the Brass Co. at which Mr. Randall was not present.

Mr. COE. That is correct.

The CHAIRMAN. All right. Now, the letter is correct, is it not, so far as you thus describe it?

Mr. COE. Yes.

The CHAIRMAN. It correctly states the price which you thought would be a paying basis.

Mr. COE. I still do not think that would be a paying basis to The American Brass Co.

The CHAIRMAN. Then it correctly describes the price which you thought it would be desirable to establish if you wanted to go forward with this beryllium product.

Mr. COE. That conversation, in our own office up there, wouldn't still bring the price to the ultimate consumer down anywhere within reason.

The CHAIRMAN. That is another matter. I am trying to fix the accuracy of this conversation.

Mr. COE. The conversation took place in our own office.

The CHAIRMAN. When did it take place?

Mr. COE. Prior to the meeting with Mr. Randall.

The CHAIRMAN. All right; prior to the meeting with Mr. Randall you had a conference with important executives of The American

Brass Co. at which definite opinions were expressed with respect to prices?

Mr. COE. That is correct.

The CHAIRMAN. Now, when you had your conversation with Mr. Randall, the purpose of which was to discuss the beryllium industry, do you wish this committee to understand that you did not mention any of these facts contained in this letter?

Mr. COE. I mentioned some of the facts.

The CHAIRMAN. Which ones did you mention.

Mr. COE. I mentioned the first part, about what would be the future of the beryllium copper alloy if the price were brought down.

The CHAIRMAN. Did you suggest what the prices might be?

Mr. COE. I did not.

The CHAIRMAN. You didn't suggest to him what prices you had discussed with your associates?

Mr. COE. I did not.

The CHAIRMAN. And you never expected to discuss those prices with him?

Mr. COE. With Mr. Randall?

The CHAIRMAN. Yes.

Mr. COE. No; I did not.

The CHAIRMAN. And it was altogether immaterial to you what course he took with respect to these prices?

Mr. COE. That is correct.

The CHAIRMAN. Well, why did you have the conversation with him?

Mr. COE. I had the conversation with him to get the long-range picture of the beryllium-copper situation. We have lost money. I, as sales manager for The American Brass Co., am held accountable for the sales of our company.

The CHAIRMAN. Well now, if you were losing money it was because you weren't getting price enough for the finished products?

Mr. COE. That is correct.

The CHAIRMAN. And you discussed with Mr. Randall everything about the future of the beryllium industry, the losses that you were sustaining and probably the losses he was sustaining, but you stopped short of completing your story before you discussed any prices to the consumer? Is that correct?

Mr. COE. No; we did not.

The CHAIRMAN. Then tell us what you did.

Mr. COE. I said to him, "About what price would beryllium copper products have to be sold where the volume would be greatly increased"?

The CHAIRMAN. Fine.

And did he tell you anything?

Mr. COE. He said it would have to be somewhere near the range of the phosphor bronzes.

The CHAIRMAN. And what was that range?

Mr. COE. The phosphor bronzes sell for 30 to 40 cents a pound.

The CHAIRMAN. How does that range compare with the range set forth in Mr. Montague's letter?

Mr. COE. The range set forth in Mr. Montague's letter would make price to the consumer of anywhere from \$0.92 to \$1.09.

The CHAIRMAN. That is detail. I mean how does it compare with this range of prices that Mr. Randall mentioned?

Mr. COE. The price that we discussed in our office would be more than twice as much as the effective range of phosphor-bronze.

The CHAIRMAN. Higher than the range of phosphor-bronze?

Mr. COE. Yes, sir.

The CHAIRMAN. Much higher than the price that Mr. Randall suggested would be desirable?

Mr. COE. Yes, sir.

Mr. COX. Along this same line, Mr. Coe, was it at the conference in your office that the figure of 18 cents a pound total reduction was first discussed?

Mr. COE. It was.

Mr. COX. And at that same conference you discussed the question of passing on 10 cents of that immediately and holding 8 cents?

Mr. COE. Ten cents, not 10 percent.

Mr. COX. Ten cents, and holding the 8 cents for later reduction. Is that correct?

Mr. COE. That is right.

Mr. COX. So although you had considered those three figures, 18 cents, 10 cents, and 8 cents before you talked to Mr. Randall, those figures were not mentioned at this conference with Mr. Randall at all?

Mr. COE. They were not mentioned by me.

Mr. COX. And they were not mentioned by Mr. Pendleton?

Mr. COE. Not in my presence; no, sir.

Mr. COX. A moment ago you testified in response to a question by the chairman that it was immaterial to you what Mr. Randall did in the event that there should be a reduction in price of the master alloy. Is that correct?

Mr. COE. That is correct.

Mr. COX. In the last paragraph of Mr. Montague's letter to Mr. Sawyer, he says this:

I don't think it would be wise to advise Mr. Randall of your \$15 price until we are ready to move.

Now, if it was immaterial to you what Mr. Randall did, why did Mr. Montague suggest to Mr. Sawyer that he not advise Mr. Randall of the proposed decrease in price until you were ready to move?

Mr. COE. I have no idea.

Mr. COX. Mr. Montague, do you have any idea about that?

Mr. MONTAGUE. Dr. Sawyer did not wish the prices to be made public until he was ready to announce them.

Mr. COX. Why was it, Mr. Montague, that you thought it would be not wise for Mr. Sawyer to advise Mr. Randall as to the \$15 price until The American Brass Co. was ready to move? Perhaps you would like to read the letter.

Mr. MONTAGUE. Well, I think what I had in mind was that we had to reach some decision whether we were going to stay in the business or not.

Mr. COX. That was the only reason? What difference would it have made if you were going to stay in the business if Dr. Sawyer had advised Mr. Randall of the price?

Mr. MONTAGUE. Dr. Sawyer didn't want the price to get out until it was published.

Mr. Cox. Mr. Randall, we haven't heard very much from you about this conference up in New York.

The CHAIRMAN. Before you go into that, let me ask you just another question. Mr. Montague, I have before me the first letter that was presented by Mr. Cox. This was a letter of March 1, 1939, addressed to Dr. C. B. Sawyer and was labeled "Personal and confidential," signed by you as agent for purchases and transportation. This is the letter from which Mr. Cox read [reading]:

The principal developments of the meeting were that we lost a very considerable amount of money on beryllium copper last year, as we have ever since we have attempted to make this alloy. The loss occurred, unfortunately, on metal shipped to our largest customer, largely due to the very rigid specification and tolerances required to meet this customer's requirements. Also, losses on small lots of, say, under 100 pounds. Certain sizes of sheet, the rod business, and wire business showed satisfactory profits, but the volume was very small compared with the other items mentioned above, and the net result was a very substantial red figure.

This bearing out what Mr. Coe has testified in response to my questions that you were losing money in the beryllium business generally.

Mr. MONTAGUE. Yes, sir.

The CHAIRMAN. Apparently, from this conversation, from these letters and these conversations, you were trying to discover the future of the industry, as Mr. Coe has said.

Mr. MONTAGUE. That is right.

The CHAIRMAN. Then you concluded this letter toward the end with this paragraph:

In the meantime, we will have made up a tentative price schedule as mentioned heretofore, and then make contact with Mr. Randall, and lay the cards on the table with him. Our people feel very strongly that no move should be made, and no publicity given to the new price, until the matter has been thoroughly discussed with Mr. Randall.

Now, Mr. Montague, let me ask you to lay the cards on the table with this committee and tell us what it all means.

Mr. MONTAGUE. Well, I am not in doubt; that was my impression of this meeting in our office.

The CHAIRMAN. This is not the letter that describes the meeting.

Mr. MONTAGUE. Yes; in our office.

The CHAIRMAN. Then do you wish the committee to understand that your impression is wrong now?

Mr. MONTAGUE. No, sir. I don't know where I got that.

The CHAIRMAN. Is your impression of this letter right?

Mr. MONTAGUE. My impression of the first part of it is right.

The CHAIRMAN. And of the paragraph I have just read?

Mr. MONTAGUE. I don't think there was anything said there particularly on that subject.

The CHAIRMAN. You say nothing said "particularly."

Mr. MONTAGUE. Nothing was said in the meeting.

The CHAIRMAN. You said "particularly." What about definitely? Do you believe now that you felt then that the cards should be laid on the table with Mr. Randall?

Mr. MONTAGUE. Not what I felt, I had nothing to do with it.

The CHAIRMAN. Let me read it:

In the meantime we will have made up a tentative price schedule and then make contact with Mr. Randall, and lay the cards on the table with him. Our people feel very strongly—

there is no equivocation about that phrase.

Mr. MONTAGUE. No; that is correct.

The CHAIRMAN (reading):

Our people feel very strongly that no move should be made, and no publicity given to the new price until the matter has been thoroughly discussed with Mr. Randall.

Now, do you wish this committee to understand that you, a responsible, intelligent, able executive of the company, believe that this was a mistake and that you based it upon a false impression of what was going on in your company's conference?

Mr. MONTAGUE. No.

The CHAIRMAN. Why, of course, you don't, Mr. Montague.

You don't write letters like that. You wouldn't be holding the job you have if you were to write letters like that. Now, lay the cards on the table.

Mr. MONTAGUE. I have nothing to do with the fixing of prices.

The CHAIRMAN. What are you writing these letters for?

Mr. MONTAGUE. For information to Dr. Sawyer.

The CHAIRMAN. What was Dr. Sawyer's business?

Mr. MONTAGUE. Dr. Sawyer's business was to furnish us with our beryllium.

The CHAIRMAN. He had something to do with price, too.

Mr. MONTAGUE. The price of the product; yes, of course.

The CHAIRMAN. Do you want to tell Dr. Sawyer, who is here before the committee today, that you write letters to him based upon incomplete information and poor impression?

Mr. MONTAGUE. I may have written some.

The CHAIRMAN. Do you want him to understand that that is the way he is going to interpret your letters in the future?

Mr. MONTAGUE. No, sir.

The CHAIRMAN. Of course you don't. Now, let's lay the cards on the table. We are trying to find out how industry should fix prices.

Mr. MONTAGUE. I understand.

The CHAIRMAN. Well, now tell us. You are not in any danger here. Nobody is going to prosecute you. It is an important matter for the people of this country and for the development of the industry in this country that business executives speak frankly to the members of Government, otherwise we can't legislate. How do we know what to do? You blame government, and yet when you come before a committee authorized by the Government of your country to develop the facts, you say, "Well, I didn't particularly do that or particularly do this." Now, tell us something.

Mr. MONTAGUE. That letter, just as it stands, was what took place in that meeting.

The CHAIRMAN. Very good. How about this other letter?

Mr. MONTAGUE. That is correct. What I have said about that other letter is correct. That was my impression of what Mr. Pendleton said to me. I was not at the meeting. I was at this meeting.

The CHAIRMAN. Then it is a correct impression now that you were thoroughly aroused about this matter and you wanted to lay all the cards on the table with Mr. Randall, and you didn't want any prices given out to the public until Mr. Randall knew all about it. That is correct, isn't it?

Mr. MONTAGUE. Yes; that is correct.

The CHAIRMAN. Then, if this letter is correct, how do you explain that that letter is incorrect? The two things fit together, just like the cogs in a machine.

Mr. MONTAGUE. I didn't say that was incorrect. I said that that letter there was my impression of what Mr. Pendleton said.

The CHAIRMAN. Of course, it was your impression just as this was your impression, and the impression that you had when you wrote those letters was clearly that a tentative price schedule was arranged, that the cards were to be laid upon the table with Mr. Randall, that Mr. Coe went to see Mr. Randall, he did go to see him, he discussed the future of the industry, and after he came back you wrote a letter in which you gave the impression that these particular prices were discussed with Randall and Randall said he wouldn't commit himself, he would go back and think it over, and now you tell us the letter A is correct, letter B is wrong.

Mr. MONTAGUE. I was not at that conference.

The CHAIRMAN. We realize that, but you didn't get a wrong impression from Mr. Coe.

Mr. MONTAGUE. I didn't talk to Mr. Coe about this.

The CHAIRMAN. You didn't get a wrong impression from Mr. Pendleton. Big companies don't do business that way.

Mr. MONTAGUE. That is the impression I got from Mr. Pendleton.

The CHAIRMAN. Now if you want the committee to believe that this important matter is conducted on so inefficient a basis, on false impressions, I don't think you are doing justice to your company, nor to yourself, nor to your associates.

Mr. MONTAGUE. My understanding of this letter that you refer to of Mr. Pendleton—I talked with Mr. Pendleton and that is my impression of what Mr. Pendleton said. I was not at the meeting. Is that a fact?

The CHAIRMAN. Now you tell me.

Mr. MONTAGUE. That is the truth.

The CHAIRMAN. You know the truth, I don't.

Mr. MONTAGUE. That is the truth.

The CHAIRMAN. Very well.

Representative REECE. May I interject a question there? You referred to this negotiation with Dr. Sawyer with reference to this reduction in the price of beryllium, which after all is a very substantial reduction, the discussed reduction being from 23 to 15 dollars—about 35 percent reduction. Were there any discussion with Dr. Sawyer as to why one company was in a position to make so large a reduction at that time?

Mr. MONTAGUE. No; he simply said he was going to make this price. That was all. He came to us; it wasn't discussed particularly. He came to us and quoted this price.

Mr. Cox. Mr. Randall, there is one more sentence I would like to read to you from Mr. Montague's letter of Dr. Sawyer dated March 10. The first sentence in the second paragraph reads as follows:

Mr. John A. Coe, Jr., and Mr. Pendleton saw Mr. Lee Randall in New York yesterday and they put up to him the question of what he would do should there be a reduction in price of the master alloy.

Now I suggest to you that that was the thing that was discussed at that time.

Mr. RANDALL. Yes, sir; that was discussed at that meeting.

Mr. Cox. And you are not prepared to say now that these figures of 18 cents and 10 cents and 8 cents were not discussed at that meeting?

Mr. RANDALL. I don't remember them being discussed at that meeting.

Mr. Cox. You are not prepared to say they were not?

Mr. RANDALL. No, sir; I am not.

Mr. Cox. I will offer the letter.

The CHAIRMAN. The letter may be received.

(The letter referred to was marked "Exhibit No. 497" and is included in the appendix on p. 2293.)

Mr. Cox. Mr. Coe, hitherto we have been talking about this exchange of information between your company and Mr. Randall's company in respect to the price of beryllium products. As a matter of fact you exchange similar information with respect to the other products you make, from time to time, don't you?

Mr. Coe. We exchange information as to our published prices on other products; that is correct.

Mr. Cox. Sometimes you exchange other kinds of information.

Mr. Coe. That is correct.

Mr. Cox. I have here a letter, dated August 12, 1935, a photostatic copy of a letter, dated August 12, 1935, addressed to Mr. Randall to Mr. Clark Judd, in which this paragraph occurs [reading].

I very much appreciate such information as you are sending me regarding the matter of costs for drawing phosphor-bronze wire. Such information will be very helpful, and will, I believe, obviate the possibility of having to reduce wire prices generally.

That would indicate, would it not, that you were at least receiving information from Mr. Randall and giving him information with respect to costs at that particular time -

Mr. Coe. I know nothing about that situation.

Mr. Cox. Do you recall that letter, Mr. Judd?

Mr. JUDD. Yes; I do. This was a specific instance, I believe and recall, where there was a dispute or argument between Mr. Randall and one of his customers over a certain particular item or batch of material. And the customer, in the course of the argument, had made certain statements as to the cost in his own work; and in order to check the customer's statement in that particular instance, Mr. Randall asked for our experience on making phosphor-bronze wire of the equivalent type and quality.

Mr. Cox. And you gave him that?

Mr. JUDD. We didn't give him the figures. We simply went through our files, our costs, and replied to him that our figures seemed to indicate that his position was right and the customer was wrong. There was no definite cost on the affair.

Mr. Cox. I should like to offer that letter, if I may.

The CHAIRMAN. The letter may be received.

(The letter referred to was marked "Exhibit No. 498" and is included in the appendix on p. 2294.)

Mr. Cox. Mr. Coe, can you tell me who the assistant manager of the Torrington-Waterbury branches is? I want to know who wrote that memorandum.

Mr. Coe. Those initials—H. L. Kilborn.

Mr. Cox. This is a photostatic copy of a letter addressed to you by Mr. Kilborn, assistant manager of the Torrington-Waterbury branches, dated October 26, 1937, addressed to you as general sales manager. The subject of the letter is "Nickel Silver and Phosphor Bronze Flat Wire Extras," and I read from the third paragraph:

We are submitting for your approval a proposed and recommended list of flat wire extras for nickel silver and phosphor bronze, and would also suggest that inasmuch as extras for Everdur flat wire now follow those for phosphor bronze flat wire, the same change should be made in the Everdur list.

The writer has gone over this matter with Mr. John Hopkins, who fully concurs with the foregoing, and we might say that the list is as suggested by Mr. Lee Randall.

Who is Mr. John Hopkins?

Mr. Coe. Our cost accountant.

Mr. Cox. You testified in response to a question by Mr. Arnold that sometimes you followed the prices set by Mr. Randall. Is this a case where you followed a list of flat wire extras for nickel silver and phosphor bronze suggested by Mr. Randall?

Mr. Coe. I do not know whether that list was put into effect or not.

Mr. Cox. This letter is dated October 26, 1937, and you can't recall whether there was a change?

Mr. Coe. I cannot. There are so many products.

Mr. Cox. I should like to offer this letter if I may.

The CHAIRMAN. The letter may be received.

(The letter referred to was marked "Exhibit No. 499" and is included in the appendix on p. 2294.)

Mr. Cox. As a matter of fact there are not very many cases, are there, Mr. Coe, where Mr. Randall announced prices which are lower than yours, in any of your products on which you compete? Can you think of any instance where that has happened?

Mr. Coe. I couldn't recall, offhand, the specific instance.

Mr. Cox. By and large you regard Mr. Randall as rather a satisfactory competitor.

Mr. Coe. I do.

Mr. Cox. In fact, you so described him as such; or Mr. Montague has; in a letter to Dr. Sawyer, which I have here, dated October 7, 1935, in which Mr. Montague says:

Incidentally Mr. Randall is an old employee of ours, and a satisfactory competitor.

Can you tell us just what you mean by a satisfactory competitor?

Mr. Coe. I believe he carries on his business on a very high ethical plane. [Laughter.]

The CHAIRMAN. Do you have any unsatisfactory competitors?

Mr. Coe. From a sales standpoint, we do.

The CHAIRMAN. Do they ever cut the announced prices? Is that one of the ways in which you can tell whether they are unsatisfactory?

Mr. COE. There are many things entering into that word "unsatisfactory".

Mr. COX. Is the tendency to cut prices one of them?

Mr. COE. If you mean by not following our list prices, many of them do not follow our list prices.

Mr. COX. Many of the unsatisfactory competitors do not?

Mr. COE. Many of the satisfactory do not also.

Mr. COX. At least, Mr. Randall, who is a satisfactory competitor, does follow your prices.

Mr. COE. I can't say he does in all instances.

Mr. COX. Mr. Randall seems to think he does.

There is one more subject I can cover, and I think we can adjourn for lunch, unless you want to adjourn now.

The CHAIRMAN. Are you going to have these three gentlemen on again this afternoon?

Mr. COX. For a short time.

(Discussion at this point was off the record.)

The CHAIRMAN. The committee will recess until 2:15.

Mr. HENDERSON. I think it is appropriate to say, based upon some experience of my own as a reporter, that the exhibition given by our official reporter in reading back a question by the chairman was perhaps the finest and ablest and fastest it has ever been my experience to see, and I think it is no more than appropriate that the Chair should take notice of that.

The CHAIRMAN. I am very glad you called attention to the very efficient manner in which the questions and answers were taken down and repeated by the reporter. We thank you very much.

(Whereupon, at 12:40 p. m., a recess was taken until 2:15 p. m. of the same day.)

AFTERNOON SESSION

The committee resumed at 2:30 p. m. on the expiration of the recess.

The CHAIRMAN. The committee will please come to order. Are you prepared to proceed, Mr. Cox?

Mr. COX. Yes. Mr. Coe and Mr. Judd and Mr. Montague will come back. I think the committee might be interested to see some samples of products of The American Brass which Mr. Coe has been good enough to bring in. If you care to explain to the chairman what each one of those is.

TESTIMONY OF JOHN A. COE, JR., GENERAL SALES MANAGER, H. T.

MONTAGUE, PURCHASING AGENT, AND CLARK S. JUDD, VICE PRESIDENT IN CHARGE OF MANUFACTURING, THE AMERICAN BRASS CO., WATERBURY, CONN.—Resumed

Mr. COE. Mr. Senator, here are four samples of beryllium copper such as we manufacture. They are just test samples, that shows the first one is annealed, left soft; the second, annealed, heat treated; the third one is rolled six numbers hard, as we call it, has temper in

it, left in that condition. The fourth is rolled exactly the same as the third, but then is heat treated. If you would like to take those samples and bend each one, it shows you the different properties.

The CHAIRMAN. Thank you, Mr. Coe. What do you mean by "six numbers"?

Mr. COE. The gage is reduced by 50 percent. If you will take those out and then bend each one you will notice a difference in the temper.

Mr. COX. Gage is the size?

Mr. COE. Gage is the thickness. If you will try the second one; that has been annealed and then heat treated. You will notice a difference there.

The CHAIRMAN. Yes; when it is heat treated it springs back.

Mr. COE. Yes, sir. Now the third one has been rolled very hard; its thickness has been reduced by 50 percent, and left in that condition. Now, if you will just bend that.

The CHAIRMAN. Is this heated?

Mr. COE. That is not heat treated; no, sir.

The CHAIRMAN. Is this the annealed, soft, just subjected to the rolling?

Mr. COE. Yes, sir. Now, if you will take the fourth sample and bend that, you will notice it has been heat treated; the difference is in the spring qualities.

The CHAIRMAN. When you speak of heat treatment, just what do you mean? Subjected to a high degree of heat?

Mr. JUDD. Low degree, Senator; the heat-treating stage on this metal is about 275° C. for the final hardening heat treatment. If you are going to make it soft, peculiarly you have to raise it to 800° C. and quench it immediately. In other words, set that particular structure at that moment by cooling it.

Mr. COE. Those are samples of wire also.

The CHAIRMAN. These wires react in the same way, do they?

Mr. COE. Yes, sir.

Mr. COX. If it is made into a particular product, as, for example, springs to be used in a machine, the heat treating is done after the spring is formed?

Mr. JUDD. That is correct.

[Dr. Lubin assumed the Chair.]

Mr. COX. Mr. Coe, you called my attention to one error which crept into the record this morning that had to do with the volume of your business, which is represented by your sales of phosphor bronze.¹ Will you tell us now what the correct figure is?

Mr. COE. This morning in the testimony it was stated the sales of our phosphor-bronze products amounted to approximately 10 percent of our total sales. That should be approximately 1 percent.

Mr. COX. That approximately 1 percent is a volume figure in terms of pounds, is that it?

Mr. COE. In pounds; that is correct.

Mr. COX. And if you gave us a similar figure in terms of the gross return on price, that would be slightly larger?

Mr. COE. Yes; it would be slightly larger.

Mr. COX. Can you give us any idea how much larger?

Mr. COE. That is an estimate. I believe not more than 1½ percent.

¹ See p. 2091, *supra*.

Mr. Cox. One and one-half percent in terms of gross.

Mr. Cox. Speaking of phosphor bronze, there are some uses of phosphor bronze for which beryllium copper can also be used, are there not?

Mr. Coe. That is correct.

FACTORS IN FORMULATION OF PRICE POLICY

Mr. Cox. You spoke this morning of a number of factors which enter into the formulation of your price policy, and I ask you now whether in formulating that policy one factor which you take into consideration is the fact that beryllium copper does compete with phosphor bronze?

Mr. Coe. No; that does not enter into the consideration.

Mr. Cox. Do you agree with that answer, Mr. Judd?

Mr. Judd. I do.

Mr. Cox. I have here a memorandum which was taken from the files of the Beryllium Corporation, written by Mr. Gahagan, dated June 14, 1935, which purports, Mr. Judd, to be a record of a conference which Mr. Gahagan had with you on June 14, 1935. In paragraph No. 2, on page 3 of this memorandum, Mr. Gahagan says this:

Mr. Judd explained that the price increase had been made because they felt that beryllium copper was competing with a number of their products and they were not interested in developing it beyond taking care of the customers they now had. For some time they had decided that they would like to get out of business if they could find a good excuse for doing so.

Do you wish to look at that?

Mr. Judd. That may have been so.

Mr. Cox. Do you recall whether you did say that?

Mr. Judd. I have no distinct recollection of the conference, but it may be that I passed that statement.

Mr. Cox. That would indicate, would it not, that you had expressed an opinion that you had increased the price of beryllium copper because it was selling in competition with some other products of your company?

Mr. Judd. The date of that, I believe, was 1935.

Mr. Cox. That is right.

Mr. Judd. Which was within 12 months or so from the time we started in the business. Our attitude has changed since then.

Mr. Cox. So that at the present time, whatever your policy may have been in 1935, you are not attempting to hold the price of beryllium copper up to protect your trade in phosphor bronze.

Mr. Judd. That is correct; because it doesn't make much difference to us, provided we can see a profit in things, whether we sell one or the other. At that time it looked like a hopeless case.

Mr. Cox. But at that time it was your policy to keep the price up; is that correct?

Mr. Judd. At least we were trying to recoup our costs anyway. If that meant a rising tendency, it did.

Mr. Cox. We have a photostatic copy of a letter which you wrote to Mr. Coe, dated June 24, about 10 days after this conference which Mr. Gahagan reported, in which you described a conversation which you had had with Mr. Frederick Laist. Is he an employee of one of Mr. Gahagan's companies?

Mr. JUDD. Oh, no; he is general metallurgical manager of the Anaconda Copper Mining Co.

Mr. COX. I see. You had been talking, prior to writing this letter, to Mr. Laist.

Mr. JUDD. Yes.

Mr. COX. In this letter you say to Mr. Coe:

Mr. Laist took occasion to protest against a feeling which I indicated to Mr. Gahagan and which I had derived from conversation with some of our sales people in Waterbury. This feeling was that the price which we expect to charge for beryllium bronze should be sufficient to protect our present trade in phosphor-bronze, and that beryllium bronze should be confined to the field of heat-treating purposes.

Do you recall that?

Mr. JUDD. I don't recall it exactly, but I presume it is exactly as stated.

Mr. COX. If we accept this statement, then it was your policy at that time.

Mr. JUDD. At that time in 1935.

Mr. COX. Can you tell us approximately when that policy changed?

Mr. JUDD. I think it was a gradual change. I wouldn't set any particular time for it.

Mr. COX. No particular date on which you abandoned the policy?

Mr. JUDD. I couldn't say so.

Mr. COX. Of course it is true today, Mr. Judd, that the price of beryllium copper is substantially higher than the price of phosphor-bronze.

Mr. JUDD. But influenced by other factors in that particular.

Mr. COX. By the way, there was some testimony yesterday by Mr. Hensel to the effect that he purchased some fabricated products from your company.

Mr. COE. That is correct.

Mr. COX. Mr. Hensel also testified that as a result of certain arrangements he had made with Dr. Rohn and Mr. Gahagan, he requested The American Brass Co. to use master alloy purchased from Mr. Gahagan and in fabricating any products made for his order.

Mr. COE. That was his statement. That is correct.

Mr. COX. Do you recall whether he did make such a request to your company?

Mr. COE. There was a request from the Mallory Co. to The American Brass Co. to use the master alloy as furnished by Mr. Gahagan's company in the production of material for Mallory.

Mr. COX. Did you use Mr. Gahagan's material?

Mr. COE. We do not know. It was all in the same bin. We have no idea whether it came from Gahagan or came from Brush.

Mr. COX. And you haven't since that first request was made sold any fabricated products to the Mallory Co. in which you are sure you have used Mr. Gahagan's products?

Mr. COE. We couldn't be sure on any of it.

Mr. COX. It might be and it might not.

This morning, discussing your price policy, I think you testified in response to the question the chairman asked, that one of the considerations which influenced your company in determining whether to raise or lower prices was these costs you incurred in connection with the production of material.

Mr. COE. That is a vital part of the price.

Mr. COX. And that if some other company in the industry lowered the price, you felt that you could lower the price because your cost would probably be no higher than theirs.

Mr. COE. I don't believe I made that statement; no, sir.

Mr. COX. You didn't intend to?

Mr. COE. I did not intend to make that statement; no, sir.

Mr. COX. Take the case of beryllium. There is only one other company that fabricates beryllium in any substantial amount.

Mr. COE. That is correct.

Mr. COX. And Mr. Randall testified this morning that his tendency was to follow the prices which your company announced for those products.¹

Mr. COE. He did.

Mr. COX. Do you have any opinion as to whether, in the production of these beryllium products, your costs are higher or lower than Mr. Randall's in any respect?

Mr. COE. I have no way of knowing at all.

Mr. COX. You have no opinion as to whether his method of production is as efficient as yours?

Mr. COE. I have no opinion on that subject. I would not have occasion to know.

Mr. COX. If his costs were in any respect lower that would, I suppose, be a basis for assuming he might be able to sell a fabricated product at a lower price?

Mr. COE. It might be.

Mr. COX. Mr. Judd, I am going to show you a photostatic copy of a document, and ask you if this is a copy of a letter which you wrote under date of February 1, 1939, to J. F. Ackerman, superintendent of the Waterbury branch. I would like to have that back after Mr. Judd has looked at it.

Mr. JUDD. I recognize it; yes, sir.

Mr. COX. In this letter, which is dated February 1, 1939, you point out first that, among other things, the cost of the master alloy is only one of the factors affecting what you call the lack of return in the beryllium business, and then you go on to say—

I am informed on good authority that the Riverside Metal Co. have a very considerable edge on us in the casting-shop cost, due to the almost entire elimination of drossing in their method of melting—they have no loss by dross to speak of. We are not informed as to their methods but are told that there is nothing revolutionary in it, and that, in fact, their methods have been in common use on other products for years.

Then, on the next page you state again—

I am told that the methods used in the Riverside plant are their own development and involve no licenses or patent complications. In other words, since they have eliminated dross they have apparently used their "bean" a little better than we have without spending very much money to do it.

That letter would indicate, would it not, Mr. Judd, that in certain respects you thought Mr. Randall's costs were a little lower than your own?

Mr. JUDD. In regard to the casting it would.

Mr. COX. And to the extent that his operations were more efficient and his costs lower, he should be able to sell the fabricated product at a lower price.

¹ P. 2086, *supra*.

Mr. JUDD. If he didn't lose it on the rest of the operation, which might be possible.

Mr. COX. But assuming all the rest of the factors remained the same, he should be able to.

Mr. JUDD. Yes.

Mr. COX. I should like to offer that letter, if I may.

Acting Chairman LUBIN. It may be admitted.

(The letter referred to was marked "Exhibit No. 500" and is included in the appendix on p. 2295.)

Mr. COX. Do you remember, Mr. Coe, or Mr. Montague, when Mr. Sawyer first went into the business of producing that master alloy?

Mr. COE. I believe we first purchased some from him in 1934.

Mr. COX. Did you talk to him before he went into the production of the master alloy?

Mr. COE. I did not.

Mr. COX. Did Mr. Montague talk to him?

Mr. MONTAGUE. Yes.

Mr. COX. Would it be fair to say you encouraged him in any way?

Mr. MONTAGUE. Yes.

Mr. COX. At that time you were purchasing such master alloy as you used from the Beryllium Corporation?

Mr. MONTAGUE. Yes, sir.

Mr. COX. And would it be fair to say that as a general proposition you prefer to have more than one source of supply?

Mr. MONTAGUE. Absolutely, always.

Mr. COX. Of course, since Mr. Sawyer went into business there has been a competitive price for the master alloy.

Mr. MONTAGUE. Yes, sir.

Mr. COX. And, of course, you prefer to buy the materials which you use in your production on a competitive basis.

Mr. MONTAGUE. Yes, sir.

Mr. COX. Have you purchased all of your requirements from Mr. Sawyer since he went into business?

Mr. MONTAGUE. No, sir.

Mr. COX. Can you tell us roughly how your purchases have been divided, without giving precise figures?

Mr. MONTAGUE. You had those figures in the record this morning—6,000 pounds and 8,000, about—6,000 pounds roughly from the Beryllium Corporation, and about 8,000 from Brush. That is starting way back from the beginning.

Mr. COX. You do, from time to time, discuss with Mr. Sawyer, changes in price of the master alloy, do you not?

Mr. MONTAGUE. A good deal. He has come to us a number of times wanting to change, or thinking he might be able to change. He had a theory that by bringing the price down he would increase the output.

Mr. COX. And I suppose your tendency has been to encourage decrease in price?

Mr. MONTAGUE. Absolutely.

Mr. COX. Do you ever discuss the price of the master alloy with the Beryllium Corporation?

Mr. MONTAGUE. Yes, sir.

Mr. COX. You have from time to time?

Mr. MONTAGUE. Yes, sir.

Mr. Cox. And you encourage them also to reduce the price?

Mr. MONTAGUE. Yes, sir; everybody that came in.

Mr. Cox. I think there was testimony this morning that the first price at which Dr. Sawyer sold the master alloy to you was \$30.

Mr. MONTAGUE. No, sir.

Mr. Cox. \$25?

Mr. MONTAGUE. We gave him an order, I think it was for 250 pounds or 200 pounds, I am not sure without looking it up. He billed part of that at \$25 and then voluntarily reduced it to \$23 before the order was complete.

Mr. Cox. Do you recall whether at that time you had any conversations with Mr. Randall about your source of supply?

Mr. MONTAGUE. No, sir; I had never met Mr. Randall and have never seen him but twice in my life until today.

Mr. Cox. Mr. Coe, do you know whether anyone else in the company had any conversations with Mr. Randall in 1934-35 about the price at which you were able to buy?

Mr. COE. I know of no such conversations.

Mr. Cox. Do you, Mr. Judd?

Mr. JUDD. Yes.

Mr. Cox. Will you tell us about such conversations?

Mr. JUDD. I know Mr. Randall, and I have talked about the source of supply and the various complications that surround it, and I haven't any question but that the price of the material we were paying, and that sort of thing was discussed.

Mr. Cox. It is a fact, isn't it, that in 1936, at one point Mr. Randall discovered that your company was able to purchase the master alloy at a lower price than he was paying Mr. Gahagan's company.

Mr. JUDD. I think there was such an occurrence; yes.

Mr. Cox. And he came to you and asked you about that.

Mr. JUDD. I wouldn't be surprised; I don't recall the exact circumstances, but I know that such things have occurred.

Mr. Cox. You don't feel that your relations with Mr. Sawyer are any different in character from your relations with Mr. Gahagan's company, I assume.

Mr. JUDD. In general, no.

Mr. Cox. Well, in any particular are they any different?

Mr. JUDD. Well, you must remember that the patent situation is pretty complicated and as between Mr. Sawyer and Mr. Gahagan there is a little difference on that ground. Otherwise, I wouldn't say there was any difference.

Mr. Cox. The patent situation of which you speak, I assume, is the situation in respect to the patents on the heat-treating process.

Mr. JUDD. Exactly.

Mr. Cox. The letter which was offered in evidence this morning marked "Exhibit No. 496," a letter from Mr. Montague to Mr. Sawyer, dated March 1, 1939, which discusses a proposed price decrease in the master alloy, contains this paragraph, Mr. Judd, which I would like to read both to you and Mr. Montague.

Mr. MONTAGUE. What was the date of that?

Mr. Cox. This is the March 1, 1939, letter, Mr. Montague [reading]:

Mr. Snyder apparently has had several calls in the New York office from the Beryllium Corporation, including one from Mr. Whitney—

Mr. MONTAGUE (interposing). That name was a mistake; it should have been Mr. Childs.

Mr. Cox. Mr. Childs instead of Mr. Whitney—

and he had gained the impression that they would be willing to make a substantial reduction in price in order to stimulate business; in other words, they are thinking somewhat along the same lines as you are. Mr. Judd advised him that our obligations are with you, that you had already discussed that matter with us, and that we had not discussed it with the Beryllium Corporation.

Who is Mr. Snyder, for the sake of the record?

Mr. JUDD. Mr. Snyder is a sales development engineer of ours located in New York City.

Mr. Cox. Would it be a correct interpretation of that paragraph to say that Mr. Childs had talked to Mr. Snyder about the possibility of reducing the price in the master alloy? Would you like to look at that?

Mr. MONTAGUE. I think that is what Mr. Snyder said; yes.

Mr. Cox. You didn't talk to Mr. Childs?

Mr. MONTAGUE. No.

Mr. Cox. That is what Mr. Snyder told you?

Mr. MONTAGUE. That is correct.

Mr. Cox. Now, will you tell the committee what this sentence means?—

Mr. Judd advised him that our obligations are with you; that you had already discussed this matter with us and that we could not discuss it with the Beryllium Corporation.

Mr. JUDD. I think I should answer that, should I not?

Mr. Cox. If you will.

Mr. JUDD. Well, the facts are, of course, that Mr. Sawyer is in the business because of our initiative; we were in trouble for a source of supply for a sufficient quantity at one time, and it was at that time that Mr. Sawyer started in business, more or less at our request, to help us out. I have always felt personally that, due to his entering a new business more or less to accommodate us, we are under a certain obligation to him, and I think we are.

Mr. Cox. You don't purchase all of your requirements from him?

Mr. JUDD. No; because we have a certain obligation to meet with Mr. Gahagan also.

Mr. Cox. Well, the thing that I am rather curious about, Mr. Judd, in this letter is this: I can understand why you might feel you were under obligation to buy all or a large part of your requirements from Mr. Sawyer, but why did you feel that your relationship with Mr. Sawyer precluded any discussion of a price decrease with Mr. Gahagan?

Mr. JUDD. Does that correspondence give the impression that I said that?

Mr. Cox. Well, I will read this sentence again and ask you to look at it, Mr. Judd. Maybe I have misinterpreted it.

Mr. Judd advised him that our obligations are with you—

This is a letter to Mr. Sawyer—

that you had already discussed this matter with us and that we could not discuss it with the Beryllium Corporation.

Mr. JUDD. Well, I am frank to say I don't get the gist of that particular remark.

Mr. Cox. Perhaps Mr. Montague was suffering from another misapprehension?

Mr. JUDD. I am unable to throw very much light on that because I don't recollect having made that particular statement.

Mr. Cox. You don't recollect having made that statement. Do you recall whether or not you ever did discuss that price decrease with Mr. Gahagan?

Mr. COE. Yes; we have discussed the price situation and the possibility of decreases.

Mr. Cox. Was that before or after the price was reduced?

Mr. COE. You mean this last reduction of price? I don't think so.

Mr. Cox. Do you know whether anyone from your company has discussed it?

Mr. COE. I don't think so.

Mr. Cox. This letter was written about the last price reduction, was it not?

Mr. COE. I believe it was. What was the date?

Mr. Cox. March 1, 1939.

Mr. COE. Then I would say it probably was.

Mr. Cox. You are not able to throw any light on what that means? Mr. Montague, do you have any recollection as to how you happened to include that in a sentence?

Mr. MONTAGUE. No; I have not.

Mr. Cox. Where did you get the information about the calls to Mr. Snyder, do you remember that?

Mr. MONTAGUE. I think I got that from Mr. Judd.

Mr. Cox. So that if you had an impression which led you to write this last sentence I just read, it was the result of a conversation you had with Mr. Judd?

Mr. MONTAGUE. I think so.

Acting Chairman LUBIN. Mr. Cox, what is the date of that last letter?

Mr. Cox. That letter is March 1, 1939.

Acting Chairman LUBIN. In other words, it was written within 60 days; about 60 days ago?

Mr. Cox. Yes.

Mr. COE. May I make a statement? There has been no price reduction since the date of that letter, except to reflect a drop in the price of copper.

Mr. Cox. You are speaking of the fabricated products now?

Mr. COE. That is correct. Our price has gone down, I believe, 1 cent per pound because of the drop in the price of copper.

Mr. Cox. This letter, Mr. Coe, if you want to look at it again, is a discussion of the price drop in master alloy and there was a drop in that price sometime in February?

Mr. COE. I was misunderstood.

Mr. Cox. I think that I have finished with the witnesses from The American Brass Co. Since I am not going to ask them to return, are there any questions members of the committee want to ask?

Acting Chairman LUBIN. Mr. Coe, what proportion of your beryllium copper products constitute sheet-metal wire and rods, that is, one as distinct from the other?

Mr. COE. Over the period of the last 5 years—and these figures will have to be considered rough—I would state that approximately 73 percent has been sheet metal; approximately 16 percent rod; approximately 4 percent is wire; and 4 percent is tubes. I hope that doesn't add up to more than 100 percent.

Acting Chairman LUBIN. I would say if you were a good statistician you would be worried that it didn't add to less than that. Now, what happened to the price of the specific commodities; namely, wire and rods, as opposed to sheet metal? Did they all go up about the same?

Mr. COE. No; some of them have gone up much more than others; that is, since the start of our manufacturing in 1932 or '33.

Acting Chairman LUBIN. Has there been any shift in the relative demand for the three products, or have they always held about the same ratio?

Mr. COE. They have held approximately the same ratio all during the time.

Acting Chairman LUBIN. I was very much interested in this table presented here this morning, which you identified as the prices of The American Brass Co., and you will note that specific dates are given. Are the dates given in this table the dates at which the price was actually changed?

Mr. COE. I believe they are. I would like to see that exhibit, if I may. Then I could tell you.

(Mr. Cox hands the witness "Exhibit No. 489.")

Mr. Cox. Yes, sir; that is correct.

Acting Chairman LUBIN. Now, how do you make those prices public? Do you issue them to the press, or do you send them out to your customers, or notify your salesmen?

Mr. COE. We do all three. When our prices are issued we first send a telegram to each of our branch offices. We then also notify by wire the press. We immediately start printing our prices and, of course, it takes sometimes 24 to 48 hours to get our thousands of prices printed and into the mails; so we do it all three ways.

Acting Chairman LUBIN. I am very much interested in that table because there is a similar table for the Riverside Metal Co., and the thing that interests me is that in many instances the price changes that you make are reflected in the Riverside Metal Co. prices on the identical day. Is it customary in your industry for your competitors to change their prices within 12 hours or 8 hours of the time that you have made the decision public?

Mr. COE. We often wish they would.

Mr. Cox. They did in this case.

Acting Chairman LUBIN. They did in many instances?

Mr. COE. It is the custom; yes, sir.

Acting Chairman LUBIN. I notice that in case of sheet for example, October 7, November 7, December 15, and December 31, 1936, each of those instances the price change was made by you and on those identical days price changes were made in sheet. Similarly, in the case of the early days of 1933, for example, sheet, wire and rod, the same situation occurred. Do you know of any other instances of any other of your products where changes are made on the identical day that you make them?

Mr. COE. You mean beside beryllium copper? Oh, yes; most of them take place—you see, most of these price changes reflect the price of copper, not the master alloy. The price of copper may change from day to day, or week to week. That, of course, comes to us. We change our prices. Presumably our competitors are buying copper also; if they have to pay more for copper or less for copper, they would reflect that in their changes.

Acting Chairman LUBIN. Would that be true, for example, of the change you made in your wire price between February and November, a change amounting to \$1.25?

Mr. COE. That change to \$1.25 reflected a change in differential necessary because of a loss in our manufacturing operations.

Acting Chairman LUBIN. In other words, that loss occurred at that time, and you had to change because of change of costs?

Mr. COE. We have been having a loss ever since we started the manufacture of beryllium copper. As we stated this morning, when we first put out our prices on beryllium we had no cost information available, never having made the material at all. As time went on we took costs on sample items; orders going through our mills. That had to be reflected (when it showed a loss) had to be reflected in our published prices, and therefore from time to time we have increased our manufacturing differentials, which is a considerable part of our price that we publish.

Acting Chairman LUBIN. Do you know, Mr. Coe, whether or not your firm, either The American Brass or the Anaconda, owns any stock or has any holdings in the Beryllium Corporation of America?

Mr. COE. So far as I know, there is absolutely none.

Acting Chairman LUBIN. Do you know whether they have any holdings in the Brush Beryllium Co.?

Mr. COE. So far as I know, there are absolutely none.

Acting Chairman LUBIN. Do you know of any holdings by your directors where there is any relation in that sense?

Mr. COE. There are none that I know of.

Acting Chairman LUBIN. There is one further question I would like to ask you. Perhaps Mr. Montague would want to answer it. In rolling this metal or making wire or rods, do you have to avail yourself of patents used by any other firm?

Mr. COE. I would like to refer you to Mr. Judd, if you would be willing.

Mr. JUDD. We operate entirely under our own patent and do not touch any alloys that are not covered by that patent, beryllium, of course.

Acting Chairman LUBIN. That is true not only of the actual process, but also the machines that you use?

Mr. JUDD. We know of no patents on machinery; we simply employ our usual mill machines for it.

Acting Chairman LUBIN. So there is no patent tie-up in any sense, as far as you know; you are free to both roll the sheet, to make wire, and to make rod without securing any patent licenses of any sort?

Mr. JUDD. That is our patent position; whether it is universally recognized or not I am not prepared to say.

Acting Chairman LUBIN. One final question, Mr. Montague. You stated this morning that at one time you were paying 30 cents a pound—

Mr. MONTAGUE (interposing). \$30.

Acting Chairman LUBIN. \$30 to the Beryllium Co. and I think \$26 to the Brush Co.?

Mr. MONTAGUE. \$23.

Acting Chairman LUBIN. Is it customary for the American Brass Co. to pay \$30 for something when they can get what they want for \$23?

Mr. MONTAGUE. The Brush people had not proven their ability to make satisfactory alloys at that time. We wanted to be sure that we had the second source of supply with satisfactory alloys before we gave them any more business. That is, we kept giving both companies business.

Acting Chairman LUBIN. Had there been any occasions since the Brush Co. has proved its ability to produce copper alloy where their prices differed from that of the Beryllium Co.?

Mr. MONTAGUE. How was that?

Acting Chairman LUBIN. Have there been any occasions since the Brush Co. has proved its ability to produce the alloy where you have paid them one price and paid the Beryllium Co. another?

Mr. MONTAGUE. Not of my knowledge or recollection.

(Senator O'Mahoney resumed the Chair.)

Representative REECE. When you had your discussions, Mr. Judd, with Mr. Sawyer about starting the Brush Co., did you have any discussions about the effect of the operation that his company might have upon the Beryllium Corporation?

Mr. JUDD. I don't recall that we did. Of course at that particular time we were in the position where we couldn't get satisfactory deliveries from the Beryllium Corporation, and that situation may have been discussed, but that was a temporary condition.

Representative REECE. Was there any discussion then with reference to the patents? You said in your statement earlier that that question was related to this subject. and in your conversation with Mr. Sawyer did you discuss the probable effect of the patents upon his situation if he should undertake the development?

Mr. JUDD. Only to the extent possibly that we assured Dr. Sawyer that if he used our alloy there would be no question of patent interference with anybody else.

Representative REECE. How's that?

Mr. JUDD. If Dr. Sawyer used our alloy, which contains nickel, in making up his master alloy he was not subject to any patent control by other people.

Representative REECE. Was there any discussion in case there should be any litigation over the patents that The American Brass would participate in the defense?

Mr. JUDD. I don't recall that we went so far as that because I don't think we were under any particular apprehension as to that.

Representative REECE. I don't have the letter before me, but the quotation to which Mr. Cox referred in the closing parts of the letter of Mr. Montague to Dr. Sawyer, in which reference was made about the inadvisability of discussing the reduction in the price with the Beryllium Corporation, was there any discussion during that period of the effect that this very sharp reduction in price of some 35 percent might have upon the Beryllium Corporation?

Mr. JUDD. I don't distinctly recall it.

Representative REECE. It hasn't been very long ago since the conversation took place, the letter having been written on March 1. Do you recall that there was no discussion?

Mr. JUDD. I believe there was none, sir. We were simply discussing, what discussion we had, our own relations with Dr. Sawyer and the purchase from him.

Mr. HENDERSON. May I ask a question? Mr. Cox, I didn't quite get completely the statement that you made about phosphor bronze. As I recall, you introduced some testimony there showing or tending to show that inside The American Brass Co. there was some reluctance to go ahead with the development of beryllium copper products on account of potential competition with phosphor bronze. Is phosphor bronze in a different status entirely from the beryllium manufacture? Can Mr. Coe answer that?

Mr. COE. In a price range; yes.

Mr. HENDERSON. How about the ownership and control of the patents?

Mr. COE. There are no patents on phosphor bronze. Anyone can make the alloy.

Mr. HENDERSON. So as between the two you would have a much better situation in phosphor bronze than you would in beryllium copper?

Mr. COE. I don't follow you on that.

Mr. HENDERSON. For beryllium copper you buy the master alloy, in one case at \$30 a pound, and that reflects, of course, the almost singleness of source of satisfactory beryllium alloy. Now, does the same thing obtain as to phosphor bronze? Do you have to buy phosphor alloy?

Mr. COE. We buy tin. Phosphor bronze is really a tin bronze, tin and copper in certain proportions; there are various alloys of phosphor bronze.

Mr. HENDERSON. How much importance did you attach to that discussion going on internally as to the desire of some of the people to push phosphor bronze and to minimize the pushing of beryllium copper?

Mr. COE. I did not know of that at the time.

Mr. HENDERSON. You didn't know of it at the time?

Mr. COE. No.

Mr. HENDERSON. Mr. Cox, what was the position in the plant of the man who was commenting on that?

Mr. Cox. I think the evidence to which you refer consisted of a memorandum of conversation that Mr. Gahagan had with Mr. Judd and a letter which Mr. Judd had written describing a conversation which he had had with an employee of the Anaconda Copper Co., both dated 1935; both documents contained statements which would

indicate that at that time it was the opinion of the American Brass Co. that at least one factor which should be taken into account in fixing the price of beryllium copper was whether the beryllium copper would, at a lower price, supplant phosphor bronze. I understood Mr. Judd to testify, although that may have been the policy of the company at that time that policy has since changed, but perhaps your question should properly be addressed to Mr. Judd. He gave the testimony.

Mr. HENDERSON. I would gather, Mr. Judd, then, that this recent attempt on the part of your company to get a lower price for the alloy was an attempt to expand your market.

Mr. JUDD. Exactly.

Mr. HENDERSON. And that any attitudes of employees either of your company or of Anaconda had been resolved in favor of pushing beryllium-copper products if you could.

Mr. JUDD. Exactly. Mr. Henderson, it ought to be clear, I think, that at the time that original statement was made we were engaged in what we might call experimental production, on something that might be revolutionary and something that might not. On the other hand, phosphor bronze had been one of our standard products for a great many years and we weren't going to throw everything over onto an unknown quantity. That was the situation.

Mr. HENDERSON. Is part of your more recent attitude due to a recognition of the probable superior merit of beryllium-copper products for almost exactly the same uses to which phosphor bronze has been put in the past?

Mr. JUDD. I doubt if beryllium copper will ever entirely replace phosphor bronze.

Mr. HENDERSON. That wasn't my point—of entirely replacing it. We will put it this way: You described your attitude in 1935 as an uncertain quantity then.

Mr. JUDD. Exactly.

Mr. HENDERSON. Is it more certain in your mind now as to the potentiality of beryllium?

Mr. JUDD. Yes. I feel it is.

Mr. HENDERSON. That probably we are going to have expanding use of beryllium copper?

Mr. JUDD. We feel that is true.

Mr. HENDERSON. And will that to some extent be true of the field that now is used by phosphor bronze?

Mr. JUDD. I think it is going to be, and in a different field.

Mr. O'CONNELL. Were the recent reductions in the cost of the master alloy reflected in the reduction of prices of fabricated products that you make?

Mr. JUDD. Not as yet.

Mr. O'CONNELL. Not as yet?

Mr. JUDD. No.

Mr. O'CONNELL. Does that indicate that they will be?

Mr. JUDD. I think they will be. The main thing is to remember that we have a stock of 100,000 pounds at the old price.

Mr. O'CONNELL. When was the reduction made?

Mr. JUDD. Around the 1st of March, I believe.

Mr. O'CONNELL. February 9?

Mr. Cox. Dr. Sawyer testified on or about February 9, some time between the middle of February and the 1st of March.

Mr. JUDD. Yes.

Mr. O'CONNELL. The discussion we heard this morning about the potential reduction of 18 cents in some of the fabricated products which might possibly have been divided on the basis of passing on 10 cents and keeping 8 cents to take care to some extent of inventory, hasn't culminated beyond discussion?

Mr. JUDD. No.

Mr. O'CONNELL. Mr. Coe, in connection with disseminating your prices when there is a change of price in your company, do you also send a copy of your new price list to your competitors?

Mr. COE. We do.

Mr. O'CONNELL. When do you send that, at what point?

Mr. COE. When the prices are mailed to all customers they are at the same time sent to all competitors.

Mr. O'CONNELL. When they are printed after the prices have been telegraphed to your branch offices?

Mr. COE. You must realize when we telegraph our branch offices we also send telegrams to the press. They are, therefore, available. I don't know how soon, maybe 15 minutes from the time the telegrams leave our office they are available to the public.

Mr. O'CONNELL. I see; but you don't at that time telegraph or communicate with your competitors?

Mr. COE. At times we do.

Mr. O'CONNELL. For what purposes?

Mr. COE. Some of our competitors—in fact, most of them—are customers of ours on certain things they do not make.

Mr. O'CONNELL. But I am speaking on the prices of things on which you are competitors. Do you in those cases at that point let them know what your new prices are going to be?

Mr. COE. It is for public information.

Mr. O'CONNELL. What is the case to which you refer when you let them know by telegraph at the same time at which you let your own branch offices know?

Mr. COE. It is a matter of courtesy.

Mr. O'CONNELL. Do you let your unsatisfactory competitors know as well as your satisfactory ones?

Mr. COE. We attempt to let them all know.

Mr. O'CONNELL. I see. There isn't any clear line between a satisfactory and an unsatisfactory one in your particular line of business; is there?

Mr. COE. I don't know how to draw that line.

Mr. O'CONNELL. I don't know either. I thought possibly you might.

Mr. HENDERSON. I have one or two other questions I might ask. I don't know which one could answer this. Does The American Brass have any relations with the Siemens & Halske Co.?

Mr. JUDD. No, sir.

Mr. HENDERSON. Do you have any relations with any of the German industrial companies?

Mr. JUDD. No, sir.

Mr. HENDERSON. Do you know whether Anaconda has or not?

Mr. JUDD. So far as Siemens & Halske goes, I am quite sure they have not. Of course, they sell copper in Germany, and that means there are some customers over there.

Mr. HENDERSON. Did you have any visits from or correspondence with Siemens & Halske or Dr. Rohn which would intimate that perhaps you might enter into what might be called a cartel for a division of, say, the metal and the products?

Mr. JUDD. We have never had any correspondence that I know of.

Mr. HENDERSON. No pressure of any kind or influence brought on your company to enter into the arrangement that was discussed here by previous witnesses, looking toward that division.

Mr. JUDD. That is entirely new to me. I don't think there is anything in our record of any contact.

Mr. HENDERSON. Degussa, or the representative of Degussa, either on a private or confidential basis, or as a direct representative of the company, made no representation to you?

Mr. JUDD. So far as I know, and I think I am correct in saying, there was none.

Mr. HENDERSON. You would be interested, would you not, in knowing of any such arrangement made to mark out specific fields as to the alloy and as to the product in this country at the suggestion of Siemens & Halske or Dr. Rohn? It would directly influence your business, wouldn't it?

Mr. JUDD. If they could enforce their patents it would. If they couldn't, it wouldn't.

Mr. HENDERSON. Suppose it was by common understanding. That was all that was suggested, as I remember, by a representative of Degussa to Dr. Sawyer. Did you have any knowledge that that informal negotiation and suggestion were going on?

Mr. JUDD. No. So far as I know, we are entirely outside negotiations of that sort, and I think I am correct in saying there was none.

Mr. O'CONNELL. Mr. Judd, I understood you to say a little while ago that you had some sort of obligation, both to Dr. Sawyer's company and to Mr. Gahagan's company.

Mr. JUDD. Yes; I think we have.

Mr. O'CONNELL. What sort of obligation have you toward Mr. Gahagan's company?

Mr. JUDD. I think Mr. Gahagan in the beginning, when he started to form his company or rather became interested in the industry, more or less depended on metallurgical advice which our chief metallurgist at that time gave him. I have heard Mr. Gahagan say that much. It was a case both in Dr. Sawyer's case and in Mr. Gahagan's case that we encouraged them, more or less, to start.

Mr. O'CONNELL. From what you first said, it sounded as though Mr. Gahagan would be under obligation to you.

Mr. JUDD. No; the obligation to Dr. Sawyer is a little later in date.

Mr. O'CONNELL. From the point of view of your company would you say it was to your advantage to have competing sources of materials?

Mr. JUDD. We always feel that way, and that has been one influencing factor in our approach to Dr. Sawyer in the first place.

Mr. O'CONNELL. It was of sufficient interest to your company so that if no competition exists you would create it?

Mr. JUDD. That is correct.

Mr. O'CONNELL. And, having created it, you would do whatever was reasonably necessary to have it continue?

Mr. JUDD. Exactly—not only a matter of business or price, but a matter of security in a source of supply. If anything went wrong on this complicated recovery of beryllium, we have somebody else to turn to.

Mr. O'CONNELL. You like to have a situation where you have two or three or more sources of supply, and that you will have a competitive situation in which you will get the lowest possible price.

Mr. JUDD. Exactly.

Dr. LUBIN. Has anybody ever questioned your right to roll metal or make wire or make rods under any definite patents?

Mr. JUDD. Not in any definite way. The question has been discussed.

Mr. Cox. Has that question been discussed in connection with the heat-treating patent?

Mr. JUDD. Exactly. It is the heat-treating patent that is the crux of the whole matter.

Mr. Cox. And that is the process used by the people who purchase from you?

Mr. JUDD. Yes; that is true.

Mr. Cox. The question has been raised in connection with your sale of the product?

Mr. JUDD. We have to protect their purchases.

Mr. Cox. It is processed by purchasers after it leaves your hands. Have you discussed that matter with Mr. Gahagan?

Mr. JUDD. Yes, sir.

Mr. Cox. Has he ever threatened to sue you?

Mr. JUDD. No, sir.

Mr. Cox. Have you ever discussed a royalty arrangement with him?

Mr. JUDD. We have.

Mr. Cox. Will you tell us what kind of royalty arrangement he discussed?

Mr. JUDD. I believe it was to include an open purchase of beryllium from anybody we wanted to, but as a royalty for using the patents, heat-treating patents, on such as we bought from him we were to—no; wait a minute; it is just the other way around. What we bought from other people was really in the end to cost us \$5 more.

Mr. Cox. That would be a \$5 a pound royalty to him.

Mr. JUDD. Yes.

The CHAIRMAN. Mr. Coe, how long have you been with the sales department of American Brass?

Mr. COE. I do not recall the exact date. I should say roughly 12 years, or 14 years.

The CHAIRMAN. What were you doing before then?

Mr. COE. I was in the mill.

The CHAIRMAN. Did your experience at that time have anything to do with salesmanship?

Mr. COE. No, sir; it did not.

The CHAIRMAN. So this experience which you have had in your present position is your complete experience in selling the goods of the company?

Mr. COE. I did not come directly from the mill into the position of general sales manager.

The CHAIRMAN. I wouldn't expect that, but you were in the sales department.

Mr. COE. I was; yes.

The CHAIRMAN. Have you familiarized yourself with sales methods of other companies engaged in American industry?

Mr. COE. To some extent; yes, sir.

The CHAIRMAN. To what extent?

Mr. COE. I have been interested in seeing what the steel people do, mainly.

The CHAIRMAN. Are you familiar with what they do and how they do it?

Mr. COE. Not altogether; no, sir.

The CHAIRMAN. Do you have a similar system to the steel system?

Mr. COE. In some ways we do—unquestionably.

The CHAIRMAN. Have you studied the methods of foreign producers in fixing prices?

Mr. COE. I personally have not.

IMPROVEMENT IN PRICING SYSTEMS IN AMERICAN INDUSTRIES SOUGHT

The CHAIRMAN. Do you have any personal opinion as to any improvements that might be made in the pricing systems?

Mr. COE. That is quite a difficult subject to discuss, Senator.

The CHAIRMAN. Of course it is one of the very difficult subject before the American people, and I am questioning you as an expert.

Mr. COE. I wish I were an expert.

The CHAIRMAN. Your company apparently regards you as an expert.

Mr. COE. Personally, I wish some way could be found to recognize more of the volume buying of some companies than is apparent under our present laws.

The CHAIRMAN. Volume buying?

Mr. COE. Yes, sir.

The CHAIRMAN. You think volume buying is not sufficiently recognized by our present laws?

Mr. COE. I have been unable to apply the present law to our own pricing needs.

The CHAIRMAN. What law do you refer to, specifically?

Mr. COE. Especially the Robinson-Patman Act.

The CHAIRMAN. You think a larger discount should be permitted for volume buying than is apparently provided by the law?

Mr. COE. If there were some way to take care of backlog business going from our mill from day to day, I would like that.

The CHAIRMAN. What opinion do you have with respect to what is commonly called chiseling in the trade?

Mr. COE. I will say there is plenty of it.

The CHAIRMAN. And what is it?

Mr. COE. Chiseling? Well, I can best express it in this way: That some competitors do not price their products according to the published lists that they have sent out. I do not know where their prices are.

The CHAIRMAN. How about cut prices?

Mr. COE. That is a question I can't answer. It depends on what you mean by cut prices. There are plenty of prices.

The CHAIRMAN. I would mean by that a reduction by a cut below what is regarded in an industry as being the standard price, or maybe a price justified by cost and a reasonable profit; selling below profit, for example.

Mr. COE. I think there is plenty of that in the industry.

The CHAIRMAN. Do you think that there should be any recognition of that practice, either by way of correction or otherwise, in law? In other words, does it constitute a problem of industry, so far as you have seen it?

Mr. COE. It does constitute a problem of industry; yes, quite a considerable problem.

The CHAIRMAN. What do you think, if anything, should be done about it?

Mr. COE. I don't know what the remedy is, Senator.

The CHAIRMAN. Do you think there ought to be a remedy?

Mr. COE. If there could be found some remedy that is workable; yes.

The CHAIRMAN. Then, what would you like to see—what sort of system would you like to see—in industry? You say there is plenty of chiseling and plenty of this cutting of prices below the level of profit. What would you like to see to remedy that situation? In other words, what would you regard as an ideal pricing system?

Mr. COE. I haven't given the question enough thought to be prepared to speak here today on that subject; but if fabricators would publish their prices, and they in turn would adhere to the prices that they have published, so I knew where they were, then I could better know how to run my own business.

The CHAIRMAN. Do you believe you ought to be permitted to talk with competitors, whether unsatisfactory or satisfactory, and determine what a fair price is?

Mr. COE. I do not.

The CHAIRMAN. You don't believe that should be permitted by law?

Mr. COE. I do not believe you should talk with competitors about what prices you are going to quote.

The CHAIRMAN. You believe that prices should be fixed on a competitive basis?

Mr. COE. No; I do not believe in fixed prices.

The CHAIRMAN. If you are not going to fix them on a competitive basis and you are not going to talk with your competitors, how are you going to fix prices?

Mr. COE. I don't believe in fixing prices.

The CHAIRMAN. When I say "fix," I mean determine.

Mr. COE. I believe in having all companies publish their prices, and they, in turn, adhering to their own prices that they have published, regardless of what they are.

The CHAIRMAN. Do you believe in any uniformity of price in an industry?

Mr. COE. I think uniformity of price is naturally the tendency, just as water will seek its own level. We can get no more for our product than our competitor will charge for his unless, in certain cases, we decide to charge more for ours, and pass up the business, it being unprofitable for us to take it at his price.

The CHAIRMAN. Well, do you think there ought to be any legislation to make it easier to secure uniformity of prices, or do you think that that should not be attempted?

Mr. COE. I wouldn't advocate legislation about uniformity of prices. I believe competition is the life of trade still.

The CHAIRMAN. And do you think we have competition?

Mr. COE. I know it.

The CHAIRMAN. If you were a member of this committee, what would be your inference from the testimony this morning of Mr. Randall, wasn't it, that there is the price leadership policy in this industry?

Mr. COE. People might infer many things. I don't know; I being so close to the subject, I know that that is not the case, therefore I cannot look at it objectively.

The CHAIRMAN. Do the prices in your particular industry find a natural or artificial level?

Mr. COE. They find a natural level, and sometimes it is really lower than a natural level because of the competition we are experiencing from other materials such as plastics and aluminum and other metals including stainless steel.

The CHAIRMAN. You have no suggestion then to make with respect to any modification of the antitrust laws so far as they govern agreements to determine prices?

Mr. COE. No, sir; I have none.

The CHAIRMAN. You think the law is a good law as it is?

Mr. COE. It is.

The CHAIRMAN. Is that the official view of The American Brass Co.?

Mr. COE. I am not an executive officer of The American Brass Co. I cannot speak for the company.

The CHAIRMAN. Thank you very much.

Mr. COX. If any one of you gentlemen has any further statement you would like to make, you have an opportunity now to do so, because I assume the members of the committee have finished.

Mr. JUDD. I don't care to make any.

The CHAIRMAN. We will be very glad to hear from any of you.

Thank you very much.

(The witnesses were excused.)

Mr. COX. I would like to recall Dr. Sawyer.

TESTIMONY OF CHARLES BALDWIN SAWYER, PRESIDENT, THE BRUSH BERYLLIUM CO., CLEVELAND, OHIO—Resumed

Mr. COX. Dr. Sawyer, you testified this morning about two occasions when you were approached with a proposal that looked toward the formation of some kind of a combination in which both your company and Mr. Gahagan's company would take part, and you testified that you were not interested in either one of those propositions. Do you recall the testimony?¹

Dr. SAWYER. Yes.

Mr. COX. If it is true, isn't it, that there was at least one other occasion when you were approached, either by Mr. Gahagan or by a representative of his company, with a similar proposition, is it not?

¹Supra, p. 2080.

Dr. SAWYER. I think so. At the moment it doesn't come to mind.

Mr. Cox. Is my statement incorrect?

Dr. SAWYER. No; I think not.

PATENT SITUATION IN THE INDUSTRY

Mr. Cox. In all of those conversations there was considerable emphasis placed on the patent situation by these persons who were attempting to persuade you that such a combination would be a good thing, was there not?

Dr. SAWYER. That is true.

Mr. Cox. Emphasis on the patents held by Mr. Gahagan's company, or patents to which Mr. Gahagan has rights under his agreement with the German interests.

Dr. SAWYER. That is correct.

Mr. Cox. Would it be correct to say that one group of the patents discussed in that connection were these patents on the heat-treating process?

Dr. SAWYER. That is the most important patent which he has in reference to beryllium copper.

Mr. Cox. Does your company have any patents?

Dr. SAWYER. Our company has process patents. We have three of those.

Dr. Cox. Do you have licenses under any patents owned by others?

Dr. SAWYER. We have a license under the Corson patent, which is owned by the Electro Metallurgical Corporation, a unit of Union Carbide. We have a very favorable license from them which I believe they are extending rather uniformly to others, though, of course, I can't speak for them.

Mr. Cox. Has Mr. Gahagan ever threatened to sue you or any of your customers for patent infringement?

Dr. SAWYER. Whether he has threatened to sue or whether he has threatened is a fine distinction. He has certainly threatened.

Mr. Cox. He has certainly threatened? Has he ever discussed with you this \$5 royalty fee that Mr. Judd testified about?

Dr. SAWYER. No; he has never discussed any royalty fee with us.

Mr. Cox. The discussions perhaps didn't get to the point.

Dr. SAWYER. No; they haven't got to such a point.

If you are intending to discuss Mr. Gahagan's patent rights in this field, it is only proper that the committee should be informed a little of that situation.

Mr. Cox. I think perhaps it would be a good thing if they were, because, if you recall, yesterday Mr. Gahagan testified himself as to the scope which he regarded his patent rights as having.¹ Do you recall that testimony?

Dr. SAWYER. I recall that yesterday he appeared to threaten us.

Mr. Cox. Whether his testimony could be so construed or not I shan't say now, but he did testify as to the scope of his patent rights. I think he gave that testimony in response to a question by the chairman.

I think it might be useful now, for the benefit of the committee, if you explained your views as to the patent situation.

¹ See p. 2050, *supra*.

Dr. SAWYER. I should begin at once by explaining that there were two applications in this country filed almost simultaneously on the heat treatment of beryllium copper. One of those applications was filed by the German interests with which Mr. Gahagan's corporation is affiliated. The other application was filed by an employee of the Electro Metallurgical Corporation, whose patent has depended primarily on the addition of a third metal, nickel, to beryllium copper, while the German application attempted to cover not only plain beryllium copper, consisting of two components, but beryllium copper with almost any other metal added to it.

These two applications were placed in interference in the Patent Office and eventually the United States application won the interference and was awarded a very broad claim which extended to additions of nickel below 4 percent. This patent hinges around a peculiar wording. All of the claims in the German application refer to two-component beryllium copper, which may have other metals added in amounts insufficient substantially to alter the characteristic property of the two component alloys with the single exception of nickel, which element was entirely deleted from the Masing and Dahl, or the German patents.

It would appear, therefore, from the record that nickel is not included in the Masing and Dahl patent, and furthermore, that any other metal is not included in the coverage of Mr. Gahagan's patent, provided it substantially alters the characteristic property of the two component alloys. Do I make a clear statement there?

Mr. Cox. I think I understand you.

Dr. SAWYER. That is preliminary to any discussion of the patent situation.

Mr. Cox. Then, just to tie that up, as I understand it, it is your position that inasmuch as you do add nickel or inasmuch as you sell an alloy to which nickel is to be added, that the heat-treatment process which may be applied by your customers does not fall under Mr. Gahagan's patent?

Dr. SAWYER. Yes; and that should be still further amplified. Mr. Randall's company, the Riverside Metal Co., is putting out a two-component alloy, just beryllium and copper. We are inclined to recognize the dominance of Mr. Gahagan's patent over Randall's company, and I have so stated to him. On the other hand, The American Brass Co. puts out a beryllium copper with a small addition of nickel which refines the grain. Their patent attorneys, I understand, have given them a clear case, clear procedure in that matter. The effect of this is that we have only one possible substantial customer for a master alloy. We cannot sell the Riverside Metal Co. so long as they stick to the two-component alloy.

Mr. Cox. That substantial customer, of course, is The American Brass?

Dr. SAWYER. That is The American Brass.

Mr. Cox. There was one question I meant to ask you this morning. It has nothing to do with patents, but I think this is an appropriate time to ask it. We introduced in evidence this morning a table of your prices of the master alloy and also a chart showing those prices.

Are you familiar at all with the prices of the master alloy which Mr. Gahagan's companies have charged?

¹ "Exhibit No. 482," appendix, p. 2283.

Dr. SAWYER. Most of the time they have met our prices.

Mr. Cox. Would it be correct to say that in each instance since 1934 when the price has gone down your company was the first to reduce the price?

Dr. SAWYER. I believe that we occupied there a position of price leadership which was purely accidental.

Mr. Cox. You were interested in reducing the price, were you not?

Dr. SAWYER. Yes; we certainly were.

Mr. Cox. You weren't interested in keeping the price up?

Dr. SAWYER. We do not see how we can make money until we get volume.

Mr. Cox. Irrespective of anything that Mr. Gahagan was doing or would do, you wanted to reduce the price and did reduce the price?

Dr. SAWYER. We have no relation with Mr. Gahagan's company on the subject of price reduction, though I would say this, that on the first reduction by us I believe that that announcement took place very inopportunistically for him. I understood subsequently that he was in the process of financing and that it was most inopportunist. Therefore, it would be my instinct at any time when I had a price reduction to so inform him.

Mr. Cox. Have you done that since that time whenever you have reduced the price?

Dr. SAWYER. There has been only one occasion since that time.

Mr. Cox. That was the February reduction?

Dr. SAWYER. That was the one occasion.

Mr. Cox. Was he informed at that time?

Dr. SAWYER. He was not but Mr. Stannard was informed at that time.

Mr. Cox. In connection with patents which your company has, have you applied for any patents in foreign countries?

Dr. SAWYER. Yes; we have process patents for which we placed applications in Germany. There were two steps in this process which refers to the extraction of beryllium oxide from the ore, that being almost universally the first step in the recovery of the metal. Now in the extraction of the oxide, one such patent was filed in Germany, allowed and issued. Another patent in that process which covers the separation of aluminum occurring in the ore from the beryllium was filed and allowed.

There is in Germany a period subsequent to allowance when those interested in the proposed patent may file a protest, bringing up alleged priority. You wish me to tell this story, don't you?

Mr. Cox. Yes; I think the committee may wish it.

Dr. SAWYER. Now you have heard of Dr. Kertess, and I wish to say that he asked at one time before the issuance or allowance of this second German patent to bring with him a Dr. Martin, who is an expert from the Deutsche Gold und Silber Scheideanstalt. This we permitted him to do, and I sought to interest them in the possibility of an exchange of research, that having been my object in filing the German patents. Dr. Martin came to our laboratories and we conducted him through them, telling him of our process for extracting the oxide. He stated that he did not believe the separation of beryllium from aluminum by the very simple method which we were employing would work. Consequently we demonstrated to him there in the laboratory that it did work, and that it was a very clean

separation. He expressed his surprise. No arrangement for the exchange of research was in any way culminated.

Dr. Martin returned to Germany and in the period of protest a protest was filed against the issuance of our patent by the Deutsche Gold und Silber Scheideanstalt. We carried this through the natural course of events provided by the German Patent Office and subsequently lost our appeal, which we felt was perhaps not a meritorious action.

The reasons, of course, for desiring these German patents was so that we might gain a foothold in the home grounds of the holders of the United States patents, so that we might trade with them, thereby acquiring rights in this country in exchange for our research.

It may be said truthfully, I think, that the United States is the happy hunting ground for German research and that if you can express the existence of a market for research, that this country is a splendid example.

In our experience we have not found that it is easy to market the products of our research in Germany. We feel that due partly to their monetary policies and partly perhaps to other nationalistic policies that we can not establish our rights there. Consequently, should we be successful in developing a good process, that becomes available to competitors in Germany without any recompense to us, we may conceivably, should there be no tariff, be forced to compete with the products of our own research. We may have our own brains turned against us, and I have some idea that this may possibly have happened in this instance. I don't think of anything to add to that for the moment.

Mr. HENDERSON. May I ask a question at this point, Mr. Chairman? As I understand it, you filed these patents in Germany with the hope that you could get an exchange of research information with Dr. Rohn's company and others interested in the development of the beryllium alloys.

Dr. SAWYER. Research information is one aspect of it, not so important as research rights.

Mr. HENDERSON. Research rights. But it had nothing to do with the marking out of territories, that is commercial territories or reservation of markets and such?

Dr. SAWYER. No; we had absolutely nothing of that sort in mind. We simply wished to obtain some kind of a foothold so that we might obtain United States rights here.

Mr. HENDERSON. I see, but I wasn't here this morning, and I understand that your testimony was that the German group, through Dr. Rohn, approached you as to a division between the alloys and the products in this country.

Dr. SAWYER. No; he didn't approach us with reference to any division. He approached us more with the idea that it was bad for us to compete with Mr. Gahagan's company.

Mr. HENDERSON. There was no doubt in your mind at the time that it had to do with something else than research rights? It was commercial rights?

Dr. SAWYER. I felt that he was trying to develop every avenue for getting us out of the competitive field with Mr. Gahagan. If we went out of business, that was one way of doing it. He told us.

that the German products were so superior to the United States products that the American mills would not be able to compete with them. That was one line of attack.

Mr. HENDERSON. Did you hear the semantics yesterday of Dr. Kertess about that letter which he had written to you?¹

Dr. SAWYER. Yes; I heard that, but I missed the word that you used there.

Mr. HENDERSON. Semantics is a \$2 word meaning, using one word and meaning another.

Dr. SAWYER. I heard Dr. Kertess' testimony.

Mr. HENDERSON. And I heard the semantics.

The CHAIRMAN. Have you suggestions for the committee, Mr. Sawyer, with respect to what might be done to protect American brains from competition of its own developments in the hands of others?

Dr. SAWYER. Yes; I have some suggestions there. The patent law, I believe, provides that before an inventor may have a patent granted to him he must disclose in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains or with which it is most nearly connected, to make, construct, compound, and use the same—referring to an invention. It has seemed to me that there have lately been a considerable number of so-called paper patents issuing from the Office and right at the outset I want to say that I do not consider this a criticism of the Office but rather the result of an overburdening. I think there has been a requirement that the patent officers keep more up to date and this has resulted in an effort to hurry the work, and that some unfortunate applications have come out of it.

Now, what is a paper patent? I understand that if a man homesteads a piece of ground that he has to put a considerable amount of work on it. It isn't sufficient for him to tear up one stump and go back and claim that he is entitled to the homestead. I understand that in Canada if you wish to obtain possession of a mining claim it is necessary to put a certain amount of work on each claim that you seek to obtain possession of, but in the Patent Office it appears to be frequently the case that you may, so to speak, make one determination of a property which would correspond, let us say, to tearing up a single stump in a homestead ground and then claiming a wide range of protection.

That then, by way of illustration, might be called a definition of a paper patent, when you claim a wide range of protection, for instance, in an alloy patent. I would not call a single property there determined as being a full, clear, concise, and exact description of the invention so that anyone may use it.

How does that work out sometimes? These paper patents. I have here a patent issued in 1939 granted to Heraeus Vacuumschmelze on the production of beryllium copper. This patent I would classify as a paper patent and yet its field of protection is very wide. It so happens that that particular patent bears a relation to a process which we have been operating. In other words, because of the wide coverage of this patent, we may find that we are infringing.

¹ Supra p 2070 et seq.

The CHAIRMAN. What is the number of that patent?

Dr. SAWYER. I can put this in the record.

The CHAIRMAN. Do you know the number of it?

Dr. SAWYER. Yes; 2149257.

The CHAIRMAN. Did you resist that patent?

Dr. SAWYER. We had no opportunity to do that.

The CHAIRMAN. You didn't know about it until it was issued?

Dr. SAWYER. We knew nothing about it until it was issued. Now we have in the Office a patent application of our own, covering what we consider the valid aspects of this field. Against our patent in the Office there were cited two or three references, on the issue of this German patent. We immediately obtained the file history and we found that no references were cited against it whatever. There was no interference set up with our patent. It is interesting in this German patent to note that it was preceded by three others of a more limited nature, and the inventor himself says according to the present invention I may dispense with the previous molten-copper bath entirely, if desired; similarly, one need not operate with a rarefied chamber or a hydrogen atmosphere, but may proceed in a closed crucible. That might be considered a field in which we operate.

Mr. Cox. Do you have anything more you want to say about that, Dr. Sawyer?

Dr. SAWYER. Yes. That is an illustration of what is unfortunate for a small company.

The CHAIRMAN. You have described the situation, but you have not suggested the remedy.

Dr. SAWYER. This I would call a paper patent. I think that when an inventor covers a wide range and seeks protection there he should make appropriate disclosures over the range. To go back to the homestead illustration here——

The CHAIRMAN (interposing). What you are saying amounts to a declaration that in your opinion the representations which were made in the application for the particular patent you have discussed were not broad enough to meet the requirements of the law and that would be a matter of administration?

Dr. SAWYER. That is right.

The CHAIRMAN. And of the exercise of judgment upon the part of the examiners?

Dr. SAWYER. Yes; thank you. The cure to my mind is not any change in the patent law whatever. I don't think that is necessary.

The CHAIRMAN. But a larger staff to examine applications more carefully?

Dr. SAWYER. Yes; and I think that in turn——

The CHAIRMAN (interposing). Of course, that is the question, from time to time.

Dr. SAWYER. I think that in its turn would help relieve the burden on the Patent Office. Because as things stand now it seems that you can't tell what may get through and therefore the hope is born that if you file something perhaps it will come out and you may derive the benefit from it, and this to my mind can only result in an increasing number of patent applications.

The CHAIRMAN. I think some homestead patents have been issued, too, where there was only a stump dug up.

Dr. SAWYER. I want to say here at the same moment that I speak of this German patent that I know the examiner there, that he is an excellent man with much experience, and that we are indebted to him for other actions of very good quality. I could only explain this that he was overburdened.

On the further subject of paper patents, I have selected 14 paper patents from the alloy field of beryllium. These go through here. Here is one on the subject of hardening gold, I believe, in which there is not even a hardness determination made. There are a number of others. I believe that many of the German patents which have been taken out are of that nature.

By way of illustration of what I consider a proper patent, I can submit one here which goes without saying is of the Brush Co., wherein I have some six pages of printed matter in the disclosure, with curves, showing the behavior of the process in its different ranges.

Representative REECE. That is not unusual.

Dr. SAWYER. No; I don't say that it is unusual. I say that it is an illustration of a man's doing work somewhat in proportion to the ground which he seeks to cover. In other words, when you attempt to obtain broad coverage you ought also to do a very considerable amount of work. Contrast that with the nickel-beryllium patent and its heat treatment, about which we heard something yesterday, and which as it stands would prevent our company from entering the nickel-beryllium field. I find a few determinations of hardness—nothing stated of the tensile strength, the ductility, and the yield point and the ordinary physical properties required by an engineer to use an alloy. I don't see how that reconciles with the language of the act:

Full, clear, concise, and exact terms.

Furthermore, this nickel patent is not confined simply to beryllium and nickel, but it provides for the additions of aluminum, tin, iron, cobalt, and copper, and I do not find any properties whatever of the resulting alloys when you have made those additions. In other words, the nickel-beryllium field is not analogous to the copper-beryllium field. There appears to be, so far as this patent is concerned, no out for us.

The CHAIRMAN. Have you any opinion with respect to the advisability of permitting international agreements in patents for the purpose of dividing territories, internationally?

Dr. SAWYER. That is a subject on which I am sorry that I am not prepared to speak. It would be a little difficult. I could generalize.

The CHAIRMAN. You are familiar with the operation of that sort of an understanding, are you not?

Dr. SAWYER. Yes; as shown by yesterday's testimony.

The CHAIRMAN. Yes; and your own interview.

Dr. SAWYER. Yes; I am familiar with it.

The CHAIRMAN. What is your opinion of that?

Dr. SAWYER. I don't think that it is necessarily bad. I think that the issuance of a patent too broad for the subject matter disclosed is bad, the issuance of protection too broad for the subject matter disclosed—I think that is bad.

The CHAIRMAN. Is it your opinion that artificial agencies which are created by governments should be able to divide up the world

among themselves without the knowledge or consent of the governments which create them?

Dr. SAWYER. Practically I don't think that it works out in that way, and I appear to be dodging your question, but partly because my mind isn't clear on that.

The CHAIRMAN. I don't think you are dodging. I haven't had that impression. But you don't have any definite opinion about that?

Dr. SAWYER. No, I don't; I think in some instances it would turn out all right. I understand that where national defense is involved the Government may say to an individual that he is at liberty to disregard patents which a sovereign government has issued.

The CHAIRMAN. Well, of course, in case of national defense that would be done, and it has been done. This country during the World War took over German patents, as you know.

Dr. SAWYER. I can say this, that so long as there is a reliable patent protection, little fellows can always compete with big fellows; they can always develop something that is new and useful and secure it to themselves and have a basis upon which they may trade with big fellows. I think that on the subject of compulsory licenses this would operate in the direction of favoring the big fellows who presumably, because of their size, would not greatly object to paying a reasonable royalty return and would yet compete so successfully with the little ones as to make it difficult.

Mr. Cox. Mr. Chairman, I dislike to interrupt, but I understand the time will arrive for adjournment at 4:30.

Representative REECE. There was a question or two that I would like to ask before the witness is dismissed.

Mr. Cox. That is quite all right.

Representative REECE. One thing that I would like to make inquiry about is with reference to the research work which the Brush Corporation has made. Have you spent considerable money in research work?

Dr. SAWYER. Oh, yes; certainly.

Representative REECE. What would you estimate the amount which you have spent in research?

Dr. SAWYER. I imagine that that would run something like \$150,000.

Representative REECE. As I recall the testimony this morning with reference to the prices, you reduced your price first from \$30 to \$23?

Dr. SAWYER. We started out with \$25 and reduced it to \$23.

Representative REECE. And then about the 1st of March you reduced it from \$23 to \$15.

Dr. SAWYER. That is right.

Representative REECE. Did you have discussions with The American Brass Co. with reference to this reduction last March?

Dr. SAWYER. Yes; we had a good many discussions with them off and on, always looking toward the possible increase of the market by virtue of a reduction so that we both could get away from the curse of this minuscule production.

Representative REECE. What do you estimate the cost of producing beryllium to be?

Dr. SAWYER. There is no sense in at any time submitting a cost estimate of production without at the same time giving the figures

for the volume. In other words, at one volume, which we might say is X , our cost of production would be \$15, at another volume of $2X$ it might be \$10, and at $15X$ it could go down as low as \$5.

Representative REECE. What has been the volume of your sales since its reduction from \$23 to \$15?

Dr. SAWYER. There has been no noticeable change, and we should not expect it.

Representative REECE. How many customers have you sold to since that time other than The American Brass Co.?

Dr. SAWYER. We have sold to two others, as I recall it, besides the American Brass.

Representative REECE. Any considerable quantities?

Dr. SAWYER. No; they are very small quantities.

Representative REECE. Has The American Brass bought any considerable quantity since that reduction?

Dr. SAWYER. No; it wouldn't affect their consumption immediately. These price reductions begin to take effect in the volume only a considerable period after the reduction has been made, perhaps a year, perhaps several years.

Representative REECE. In your discussions with The American Brass Co. with reference to this last reduction from \$23 to \$15, was there any reference to the effect that this reduction might have upon the Beryllium Corporation?

Dr. SAWYER. No; there was no discussion as to what would happen to the Beryllium Corporation, and in that connection I want to bring out clearly that the Brush Beryllium Co. is not endowed. There has been some confusion because the Brush Foundation at Cleveland, is endowed for the purpose of medical research and is a foundation existing in memory of Mr. Brush's son, my partner, but it relates in no way to the Brush Beryllium Co.

Representative REECE. In view of the reduction being so marked, that is a reduction of about 35 percent made at one time, and made, it would appear, from the correspondence introduced in the record earlier, after conferences with the officials of The American Brass Co. as to the basis on which the reduction was made, what considerations came into your mind that caused you to decide to make a reduction of 35 percent after what appeared to be secret negotiations with The American Brass Co., or at least from the files introduced in the record, The American Brass Co. officials cautioning certain representatives of theirs not to mention this proposed reduction in such a way that it would come to the attention of your competitors, the chief competitor, of course, being the Beryllium Corporation?

Dr. SAWYER. I didn't want to have that price made general until we had decided upon it, naturally, and that, I believe, was the reason for the caution.

Representative REECE. Well, what were the considerations that justified you in making a reduction from \$23 to \$15?¹

Dr. SAWYER. As time goes along in any process you inevitably improve its operation, increase its yield, develop a better crew of men to handle it, learn the peculiarities of the product which you are producing, and as time goes along those accumulate. Finally, the immediate consideration which occupied us was the persistent loss of The American Brass Co. in carrying on this development. We were afraid

¹ See footnote 1, p. 2083, supra.

that they would get discouraged and go out of business, which, of course, would be extremely disastrous to us. As I have already pointed out to you, they are the only substantial customer we have.

Representative REECE. But even the reduction of 35 percent in price doesn't seem to have stimulated the purchases very considerably so far.

Dr. SAWYER. No; it will not have any immediate effect; it will be only over a period of time.

Representative REECE. Why is that?

Dr. SAWYER. It is due to the peculiar nature not of beryllium but of any engineering problem. May I illustrate?

Representative REECE. Yes.

Dr. SAWYER. I had an idea—and several of us had an idea—that beryllium copper wires would be useful in making screens used in paper-making machines. Now, let us say that we interest someone who is willing to try such an application, and we get in his hands some wire so that he may try it. The first thing about such a screen is that it must be made from wire exceptionally uniform in nature so that most of the wire people have their own wire-drawing works in order to produce this very uniform wire. We ran right into that at once in the case of this beryllium wire. We sought to weave it into screens and found it wasn't uniform. Therefore it had to be taken up at the wire works. They sought to draw the wire and got into annealing problems, scale problems, and bit by bit those particular problems have to be overcome, let us say, at 3 months to a half year intervals between each successive step, and the time draws on and keeps on going on.

Representative REECE. Thank you very kindly. The one thing that occurred to my mind—and I presume there was no significance in the fact—was the fact that the correspondence and other evidence that was introduced in the record early today indicated that the Brush Corporation was in secret negotiations or conferences with reference to some kind of an arrangement by which the price is going to be reduced from twenty-three to fifteen dollars; and those in the industry, knowing of the negotiations, being cautioned not to divulge this possible reduction in the price to the Beryllium Corporation. It all seemed just a little odd, but I presume there was no significance to it.

UNCERTAINTY AS TO AMOUNT OF BERYLLIUM ORE EXISTING

Mr. JANSSEN. May I ask one question, Mr. Chairman?

Dr. Sawyer, this investigation quite necessarily has elicited much interest on the part of the laymen, and from some articles that have appeared in the press, together with even some opinions that are held by people who are either directly or indirectly interested in this investigation, there seems to be an attitude or desire to want to link a certain analogy between the development of the beryllium and the aluminum industry. That again brings us, then, to a prime consideration as to the quantity of beryllium ore available.

Yesterday there was some testimony introduced to the effect that there was sufficient ore, and I am wondering if you are of the same opinion, or if this is a statement of fact, that there is at the present time sufficient ore to meet immediate demands and a reasonable demand for a reasonable expansion.

Dr. SAWYER. Your last opinion is the correct one, according to my estimate. I don't think that there are any ore reserves that in any sense approach in magnitude those of the aluminum reserves.

Mr. JANSSEN. In other words, I suppose you have had the same experience that I have, of having had reported to you extensive deposits of beryllium ore, and I am wondering if perchance you may have run into the same one I had. I recall a report of a deposit of beryllium ore in Canada. It first came to me on the basis of 90,000 tons. The second time I heard of it, it was 90,000 pounds, and I am wondering if you have had an opportunity to investigate, actually investigate, that deposit, and know how extensive it is. In other words, what I am trying to do is to establish that many of these reported deposits do have a bit of uncertainty connected therewith.

Dr. SAWYER. Yes; I believe I have investigated that deposit, if it is in the neighborhood of Winnipeg.

Mr. JANSSEN. This is north of Winnipeg.

Dr. SAWYER. On the Winnipeg River.

Yes; I went up there and looked it over and was immensely disappointed in it. There was nothing there to justify a trip to Winnipeg.

Mr. JANSSEN. In other words, you also glimpsed through the 90,000 tons and the 90,000 pounds, and what did you find?

Dr. SAWYER. I found one interesting occurrence where the beryl was perhaps 25 percent of the rock, but it was extremely limited in nature and nothing upon which one could base an industry. There were other occurrences around there which resembled those I have frequently seen. The beryl was in such small quantity in the rock that the mining for the beryl alone could not be justified.

Mr. JANSSEN. Thank you.

(Representative Reece assumed the Chair.)

Mr. Cox. While we are on that subject, would it be accurate to say that the whole subject of the extent of the reserves of beryllium is now shrouded in some uncertainty?

Dr. SAWYER. Yes; I think you can always say that. I don't think that that needs be regarded as unusual. It is characteristic of the development of any new metal, so-called rare or not well known, that it may at first seem to be difficult to obtain, and then as demand grows and many people seek to fill the market the source widens, and you ultimately have an adequate quantity. I think beryllium is in that state.

Mr. Cox. At least you are not abandoning the business because of any fear that you may not be able to get enough ore if the demand develops.

Dr. SAWYER. No. When we began in 1921 we purchased half a ton of ore and had to get some old prospector to climb to the top of a mountain and knock it off, and I don't believe we could have bought more than half a ton at that time, but as the years have gone by each year has seen increasing offerings, until now I may buy several carloads at a time.

Mr. Cox. One more question I would like to ask, Dr. Sawyer. I think you testified, did you not, that there was no connection of any kind between the Brush Beryllium Co. and Mr. Gahagan's company?

Dr. SAWYER. That is correct.

Mr. Cox. So far as you know, your company, Brush Beryllium, owns no stock in Mr. Gahagan's company.

Dr. SAWYER. I know that it doesn't.

Mr. Cox. And you, of course, own no stock in Mr. Gahagan's company?

Dr. SAWYER. No.

Mr. Cox. Does anyone, so far as you know, hold any stock in Mr. Gahagan's company who is a nominee for you or for the Brush company?

Dr. SAWYER. Not so far as I know.

Mr. Cox. It was suggested to you one time last year by an employee of The American Brass Co. that you might buy some stock in Mr. Gahagan's company, was it not?

Dr. SAWYER. I recall something of that sort.

Mr. Cox. But that suggestion, in fact, was made to you in a letter dated November 18, 1938, written by Mr. Montague, was it not?

Dr. SAWYER. Yes.

Mr. Cox. But you have taken no action?

Dr. SAWYER. No; I regarded that as a facetious suggestion—

Mr. Cox (interposing). You didn't take it seriously?

Dr. SAWYER. Which was made in fun.

Mr. Cox. You have given me a written statement with respect to one situation when the matter of your infringement of the patents held by Mr. Gahagan's company was discussed. I wonder if you would object if, in the interest of time, I should simply introduce this statement bodily into the record. Would you object to that?

Dr. SAWYER. No; I think not. I would probably like to have a chance to read it over first.

Mr. Cox. I suggest, then, that you read it over, and if you have no objection, that you send it in at some later date.¹

Acting Chairman REECE. In cases of an infringement suit, you have no understanding or have had no discussion with the officials of The American Brass Co. that The American Brass Co. would participate in the defense?

Dr. SAWYER. No; we haven't had that. I suggested it once or twice. No need for action having appeared, we didn't go further with it.

Mr. Cox. I think I will excuse Dr. Sawyer now.

(The witness was excused.)

Mr. Cox. Mr. Gahagan.

TESTIMONY OF ANDREW J. GAHAGAN, PRESIDENT OF THE BERYLLIUM CORPORATION, READING, PA.—Resumed

(Senator O'Mahoney resumed the Chair.)

Mr. Cox. Mr. Gahagan, I wish you would look at this chart which I am about to show to you and tell me whether you regard that as an accurate representation of the prices which you have charged for master beryllium alloy since 1934.

Mr. GAHAGAN. Yes, sir.

¹Dr. Sawyer later returned the statement to Mr. Cox in a letter dated May 17, 1939. It was admitted to the record during hearings held June 16, 1939, marked "Exhibit No. 760," and is included in the appendix on p. 2301.

Mr. Cox. I should like to offer this chart at this time, which shows the prices charged by the Beryllium Corporation for the master alloy since 1934.

The CHAIRMAN. The chart may be admitted.

(The chart referred to was marked "Exhibit No. 501," and is included in the appendix on p. 2296.)

Mr. Cox. Dr. Sawyer testified that in the case of each of the price decreases which are shown on his chart and on the chart of your prices, he decreased his price first. Is that consistent with your recollection?

Mr. GAHAGAN. Yes, sir.

Mr. Cox. Mr. Gahagan, yesterday Dr. Hensel testified with respect to some negotiations he had with Dr. Rohn in connection with an English company in which the Mallory Co. was interested.¹

Mr. GAHAGAN. Yes.

Mr. Cox. You, of course, were familiar with those negotiations, were you not?

Mr. GAHAGAN. I was.

Mr. Cox. Would it be accurate to say that you suggested to Dr. Rohn that no agreement should be made with the Mallory Co. with respect to the English situation or give it rights under the patent which Dr. Rohn's company controlled unless the Mallory Co. reached some kind of an agreement with you in this country?

Mr. GAHAGAN. That is right.

Mr. Cox. And the agreement which you had in mind was an agreement under which the major company would purchase all of their requirements of the master alloy from your company?

Mr. GAHAGAN. That is right; or pay the royalty.

Mr. Cox. Or pay the royalty?

Mr. GAHAGAN. That is right.

Mr. Cox. And was it also a part of that understanding that you suggested to Dr. Rohn that the Mallory Co. not go into any of the fields of fabrication in which your company was engaged?

Mr. GAHAGAN. That is right.

Mr. Cox. And Dr. Hensel was correct, was he not, when he testified yesterday that as a matter of fact Dr. Rohn did lay down those conditions before he would reach any agreement with the Mallory Co. either as to their English company or their use of any patent rights which Dr. Rohn's company controlled?

Mr. GAHAGAN. I didn't hear Dr. Hensel's testimony, but that is correct.

Mr. Cox. You were so informed by Dr. Rohn?

Mr. GAHAGAN. That is right.

Mr. Cox. In this matter of price, Mr. Gahagan, did you ever discuss the price of master alloy with Dr. Sawyer at any time?

Mr. GAHAGAN. Never.

Mr. Cox. Do you know whether any representative of your company discussed the price with him?

Mr. GAHAGAN. Only here recently.

Mr. Cox. Mr. Stannard?

Mr. GAHAGAN. Mr. Stannard.

¹ Supra, p. 2062.

Mr. COX. That is on the occasion Dr. Sawyer referred to?

Mr. GAHAGAN. I guess it is.

Mr. COX. Were you informed of the price decrease?

Mr. GAHAGAN. That is right.

DEVELOPMENT OF BERYLLIUM ALLOYS

Mr. COX. Now I think in your testimony yesterday you didn't tell the committee about your relations with The American Brass Co. after you first went into the production of the master alloy, down to the present time. Will you as briefly as you can give the committee an account of that relationship, Mr. Gahagan?

Mr. GAHAGAN. I am glad to have an opportunity to do that, because I have been sitting here hearing myself and my company described as a great big monopoly. Such is not the case. As I testified yesterday afternoon, we found that with small additions of beryllium it would produce remarkable results in copper and other alloys. We naturally started to find out how we could make use of that, and we approached various copper companies, among them The American Brass Co.—Mr. Bassett, of The American Brass Co. I told Mr. Bassett that if he took beryllium and added about 2 percent of it to copper and would anneal it, heat treat it, and so forth, according to certain conditions and temperatures, time, and so forth, that he might expect certain results.

He was extremely interested in this, and I offered to give him some master alloy, but he purchased a small amount, and in a few months came into my office. At that time I had a small office in New York. He had a number of charts and some samples, and he told me:

Mr. Gahagan, all of the information that you have given us I can corroborate. We have confirmed it. We have been very much surprised at these results, and I think beryllium copper is going to have an important future.

I said, "Well, how do we get started? I would like for your company to start to manufacture beryllium copper, buy the beryllium from us." He said, "Well, that will be a question of a number of years." And I told him, "Well, I happen to know Mr. B. B. Thayer, of Anaconda, quite well. Would it be of any help or assistance if I should see him?" He said, "By all means." So I took the specimens which Mr. Bassett left with me, and some test data which he left with me, and I went down to Mr. Thayer's office the next day. Mr. Thayer was vice president of Anaconda. I showed him these specimens and figures and he wouldn't believe it. He called in Mr. Ryan, who is president of the Anaconda Co., and told him:

Andy here has something which is going to change the copper business; it is going to make it possible to use copper in thousands of places where copper has not been used heretofore.

I had a long discussion with Mr. Thayer about how we should operate, as I wanted his advice. He told me that he would get The American Brass Co. into fabrication of beryllium copper, provided I would agree that we would not give exclusive rights to any other company in the fabrication of beryllium copper for 2 or 3 years, in order to give The American Brass a running start. He further

stipulated that in case we talked exclusive rights on beryllium copper to anyone we were to give the American Brass a call at the same figure. He asked if I could come down the following morning at 11 o'clock to his office, which I did.

There I found Mr. Coe, president of The American Brass Co.; Mr. Clark Judd; Mr. Weaver, who then was the sales manager; and Mr. Bassett. There was some discussion about the advisability of going into the beryllium copper business and Mr. Coe called on each man in turn. There was some objection on the part of Mr. Weaver because beryllium copper would necessarily be expensive. He cited the expense of introducing a new metal or new alloy rather, particularly in a depression which we were in then, about 1931 or 1932 this was, and he didn't want to undertake to try to push a new expensive alloy in a depression.

Mr. Judd was not very keen about it, but Mr. Bassett, when asked what he thought, made a remark which I very well remember. He said, "Whether the Anaconda Co. or The American Brass Co., rather, goes into the beryllium copper business, or whether it doesn't, is nothing to be discussed. We have to at some time because beryllium copper is superior to any alloy we have or any alloy of copper that the world has ever seen." He said, "I have made a study of probable fabricating costs and I estimate that we could put out fabricated materials, for example, on strip of 84 cents a pound, if Mr. Gahagan could sell beryllium at \$25 a pound." At that time we had a nominal price, I think, of some \$200, about.

He said, "I know that that will probably represent some loss to him and it might represent a loss to us for some period, but we will undertake to do this, knowing that we have to spend some money to get going. We will put in a special beryllium copper department with somebody at the head of it, and we will do all we can to push it."

I said, "All right, Mr. Bassett. The price then is \$25 a pound and we will take whatever loss is necessary until you get your volume up."

He said—Mr. Bassett said:

As we reduce the price or reduce our cost of fabrication by large volume operations or larger volume operations, we will reduce our base price; that is, our fabricating spread, and at the same time we may perhaps use the phosphor bronze extras with the discounts that are used in the phosphor bronze business. We will further, of course, pass on any price reduction in beryllium that you give to us, we will pass that on to the public.

The American Brass then selected a man named George Bronson and sent him down to our office, and he stayed with us a period of—I don't know—2 or 4 weeks, and we with him investigated dozens of places to use beryllium copper. I think I am safe in saying that perhaps some of the most important uses for beryllium copper have been developed by our company. For years we have maintained a sales organization to interest people in the use of beryllium copper and have turned those prospects over to The American Brass Co., and later on over to the Riverside Metal Co.

After The American Brass Co. had been in business about a year and a half or 2 years, with the consent of The American Brass Co., we got the Riverside Metal Co. The reason for that was that it was a good thing for the beryllium department of The American Brass Co. because the salesmen of The American Brass Co. would encounter

opposition in the field for the sale of beryllium copper products because the Everdur Division or the Phosphor Bronze Division of The American Brass wouldn't want him to cut in on it. However, if they had a competitor he could say, "If I don't take this business the Riverside Metal Co. will take it." So it was thought a very healthy thing to have two people in the business.

The CHAIRMAN. It was thought by whom?

Mr. GAHAGAN. By The American Brass Co. I want to say that we had every cooperation possible from The American Brass Co. and the Riverside Metal Co. in the development of this business. They followed up every lead that we gave them, and we were very careful and always sent every prospect or every letter that we wrote to a prospect to both companies.

The CHAIRMAN. But not until you had permission from the American Brass did you enter into this arrangement with the Riverside Co.?

Mr. GAHAGAN. That was a tacit approval; yes, sir. There was nothing in writing; none of that was in writing. We took the attitude that we were going to produce beryllium and do everything we could to help them to extend the uses and they were going to do the same thing, and they did. The business went along, increased every year for 2 or 3 years, and we could see a point at which we would start breaking even, and then we got orders for large quantities of beryllium from The American Brass Co. We were told that we should produce up to 50 pounds a day. Well, in those days that was a tremendous amount of beryllium. We had a plant that could produce about 10 pounds a day.

At considerable expense I got the plant up to about 35 pounds a day. The American Brass Co. sent two people out to our plant, which was then in Marysville, Mich., to make sure that we were delivering to them and not shipping to other customers. As a matter of fact we only had those two customers.

The orders were shipped and then all of a sudden we got no more orders and the price of the fabricated material was raised from 84 cents—I am quoting ad lib now—to some 95 cents. So I went up to The American Brass Co. and had a discussion with Mr. Judd. I told Mr. Judd that I appreciated the fact that perhaps their estimate, or Mr. Bassett's original estimate of their probable cost might have been wrong and that they perhaps had found it necessary to raise their fabricated price, but that I had felt that as a matter of courtesy he might have called me up there and told me that before he published those prices because my agreement with them had been that they were going to put out a base price of 84 cents with beryllium from us at \$25.

Mr. Judd told me that they had a stock of beryllium on hand sufficient to last them for perhaps a year or more. In other words, the beryllium that we had been rushed to produce was going into stock, and that they didn't like the beryllium business, that they were thinking very seriously of getting out of it and that they had raised the prices to make it unattractive to customers and that he felt that The American Brass Co. could charge any prices that they wanted for any metals and that I had nothing whatsoever to do with it.

I told Mr. Judd that I considered this very unfair and that in view of our agreement if American Brass had decided to go out of the business they should have let us know at least a few months before-

hand when they had reached that decision in order to give us an opportunity to try to go out and get someone else in the United States in the beryllium copper business besides The American Brass and Riverside.

Mr. Judd told me that was too bad but they had changed their policy.

Representative REECE. About what time was this?

Mr. GAHAGAN. I think '34, '35, '36, somewhere along in there.

Mr. Cox. Was it at this conference that Mr. Judd told you they wanted to keep the price of beryllium high enough so the material wouldn't compete with the phosphor-bronze business?

Mr. GAHAGAN. Yes, yes; it was at that time. Mr. Judd said it was unfortunate for us that Mr. Bassett died, as Mr. Bassett believed very strongly in beryllium, but it was a rather difficult thing to manufacture and so nobody in American Brass at that time was particularly interested.

Well, this was quite a blow to us, of course, to have The American Brass Co. go out of the business as they had been taking practically all we produced. We immediately, of course, started contacting other copper fabricators and never did get anyone particularly interested in it because of the considerable difficulty in fabricating beryllium copper, as I mentioned yesterday. I assumed, of course, that the American Brass had gone out of business, but from time to time we would call on them and they would tell us, "Well, we don't need any more beryllium," but we got an occasional order, however, about every 6 months or a year later.

I then become cognizant of the fact that The American Brass Co. was not going out of the beryllium business at all, that they were still selling, so Mr. Randall told me that.

He told me further that he believed that The American Brass Co. was buying beryllium from the Brush Beryllium Corporation at \$23 a pound, or \$25, or at some lower figure. I told him I didn't believe that this was true because I had called on Dr. Sawyer some few months before and had had a long discussion. You see, Dr. Sawyer had the Brush Beryllium Corporation manufacturing certain beryllium chemicals, among them beryllium oxide, a very pure product. I called on Dr. Sawyer and told him that I was very much interested in his oxide, that we had gotten some of it and found it very pure and that we would like to help him in the business; we had no thought of going into the fabrication or manufacture, rather, of chemically pure products and salts, and that perhaps we might throw some business to him. He said no, he could get his own business. I then asked him something about the set-up of the Brush Foundation. I wanted to know if they were a research organization, what kind of research work they did. He told me substantially what he has testified to today, that they do research of all kinds, and hoped to develop those into businesses.

I told him that if he ever developed anything of any interest in beryllium metals or beryllium alloys to get in touch with us, that we had gone to considerable expense in developing the beryllium business and it hadn't gone as well as we wanted, we had a lot of patents of our own and some that we had licensed from Germany, and that we would be delighted to discuss with him some arrangement whereby

he could use some of those patents if he needed them or we would discuss with him taking over any development that he worked out, either by outright purchase or by a royalty fee to him. I might say that we have purchased any number of patents from outsiders that way, some of them on royalty bases, some of them outright purchase. I refer to inventors in the United States.

While I am on the subject, I should like to state that we have had no difficulty with the Patent Office whatsoever, and to put Dr. Sawyer's mind at rest in regard to what he terms the paper patents that Dr. Rohn has taken out without sufficient foundation of fact, I can state so that he will be fully informed, that the patents to which he refers have been in use and in operation in Germany to my certain knowledge for quite a number of years, and the process patent to which he refers as being a desk patent has also been used by us for a number of years. The Patent Office apparently knew exactly what they were doing in granting that patent.

I want to take advantage of the opportunity to correct impression.

To get back to our story, an announcement was made shortly thereafter, however, with considerable publicity by Dr. Sawyer of a new process to produce beryllium at the price of \$23 per pound. We immediately, of course, were faced with the situation that we had either to sue The American Brass Co., which we did not dare do if they purchased beryllium and heat treated it and made it into alloys and heat treated it or used it for certain articles under our article patent, or we had to try to make peace with them; at any rate, we knew we had to reduce our prices. So we reduced our price to the Riverside Metal Co. and to our other customers and we went up to The American Brass and tried to get some of their business. We were told repeatedly that they were not buying much beryllium.

The situation practically as that has continued down to date. So finally we came to the conclusion we were going to have to do just one thing, and that is put in our own fabricating equipment so that we might put out beryllium alloys in the form of rod, strip, wire, tubing, and so forth, in order to make certain that any reduction in the price of beryllium would be passed on to the public.

PATENT LICENSING ON ROYALTY BASIS

MR. GAHAGAN. I want to state what our present policy is so there will be no misunderstanding about it. We expect or hope, rather, to keep The American Brass Co. in the business, the Riverside Metal Co. in the beryllium-copper business, and other companies if they want to go into it. We don't care where they buy beryllium; we have no thought of trying to create any monopoly; all that we ask is that if anyone purchases beryllium from Dr. Sawyer or Dr. anyone else or any other company and makes up beryllium-copper alloys and heat treats those under our patents or uses them for articles under our patents or Siemens patents, that we get some nominal, fair royalty for those patents, for their use. After all, the Siemens Co. and ourselves have spent millions of dollars trying to get somewhere with this business.

The CHAIRMAN. What do you mean by "nominal, fair royalty"?

Mr. GAHAGAN. Some royalty of 5 or 10 percent of the sales price.

The CHAIRMAN. That is more than nominal.

Mr. GAHAGAN. I don't think so, in view of the development that has taken place.

Mr. COX. How about this \$5 amount?

Mr. GAHAGAN. We have discussed from time to time various royalty arrangements, since Dr. Sawyer has been in the business. Before that time we never discussed royalty because we merely bought these patents from the Siemens Co. or took licenses under them and paid them a royalty under them on our production, and in order to protect our customers.

The CHAIRMAN. Let me get that royalty business clear. You have in mind a royalty that will pay you profit.

Mr. GAHAGAN. Yes, sir.

The CHAIRMAN. Now, I don't conceive of nominal royalty to be such a royalty.

Mr. GAHAGAN. I would like for you to name some. I have been discussing this with a lot of people.

The CHAIRMAN. When the word "nominal" is used it means, to my mind, a royalty in name only.

Mr. GAHAGAN. Oh, no; I didn't mean that.

The CHAIRMAN. That isn't what you meant?

Mr. GAHAGAN. No, sir.

The CHAIRMAN. That is the exact definition of the word. You used it as a synonym for fair.

Mr. GAHAGAN. That is right, for fair.

As I stated, we have never charged a royalty to any of our customers because there is a certain psychological resistance—there certainly would be on my part—to buying a material from somebody and then having to pay them something for using it, so we have done everything in the world we could, and I wish there were some way we could get around charging for these heat-treatment patents and use patents. but after all, if we don't do it, if we don't defend those patents, the patents will be invalid, we will be forced into the position where we will have to do something whether we want to or not, and, of course, we are prepared to and expect to defend our patents in the near future.

I may say that, as I described at great length yesterday, the chief difficulty of the beryllium business is not in producing beryllium but in fabrication. I know that The American Brass Co. have lost a great deal of money on this business. I dare say that Mr. Randall has too, because the orders for beryllium copper certainly up to date are in the initial stages of small orders, expensive to handle. There are certain difficulties in the actual fabrication itself which I described at length yesterday and will not repeat, and by having fabricating facilities ourselves we hope to be in a position to furnish the American Brass Co., the Riverside Metal Co., or others, with either pure beryllium, beryllium master alloy, beryllium copper ingots, beryllium copper ingots rolled, semi-fabricated material, or fabricated material; we will ship direct to their customers and bill them or bill the customers direct, or we will take over their customers if they are not interested in handling them. In short—

The CHAIRMAN (interposing). Are the devices that are used in the fabrication protected by patents?

Mr. GAHAGAN. The devices that are we think necessary for the best fabrication, yes; but I don't say that you have to use those because beryllium copper has been fabricated by The American Brass Co., and by Riverside successfully and they have produced hundreds of thousands of pounds in the last few years.

The CHAIRMAN. Do you have any patents on the fabricating devices?

Mr. GAHAGAN. The ones that we use, yes, sir; and we think we will be able to turn out a better alloy than has been turned out up to date.

The CHAIRMAN. You are just contemplating going into the fabrication?

Mr. GAHAGAN. That is right.

The CHAIRMAN. You haven't been doing it heretofore?

Mr. GAHAGAN. No.

The CHAIRMAN. Did I understand you to say that you have these devices patented now?

Mr. GAHAGAN. Yes, sir.

The CHAIRMAN. How long have you had them patented?

Mr. GAHAGAN. Those are patents from Germany also.

The CHAIRMAN. And The American Brass Co. has not been using those patents?

Mr. GAHAGAN. No. They are distinctly fabricating beryllium copper with existing equipment. We do think a better job can be done with specialized equipment.

Our main purpose in putting in fabricating equipment has been to produce certain beryllium-nickel alloys.

The CHAIRMAN. The really significant patents are the patents on the process of making the alloy?

Mr. GAHAGAN. No; the significant patents are on the heat treatment and uses of the alloy but there are considerable on the processes, too.

The CHAIRMAN. I regard the heat treatment as being part of the process.

Mr. GAHAGAN. As I say, I didn't know I was going to be called again, but I am delighted to have an opportunity to explain, because all we have been trying to do is to put beryllium out cheaper to the public all the time and have it used on a widespread front, for all sorts of purposes, because we know that beryllium copper has a tremendous importance to this country for ordinary commercial purposes as well as military purposes.

The CHAIRMAN. What are the impediments to the development of beryllium uses?

Mr. GAHAGAN. I think none now, sir. I expect that we will go along very satisfactorily and, as I stated before, I think that things will be ironed out for The American Brass. I think we will be of considerable assistance to them and to our other customers and I hope that the business will go along very rapidly. I have been delighted sitting here and listening to their testimony to find that they have decided to finally stay in the beryllium-copper business. I didn't know that until today. I am delighted.

USE OF BERYLLIUM IN AVIATION

The CHAIRMAN. Well, what about the testimony of Dr. Kertess yesterday to the effect that beryllium is not being used in Germany to the extent that you described to the committee previously, particularly none in airplanes?

Mr. GAHAGAN. Well, I wouldn't want to get into a discussion with Dr. Kertess, a representative of a foreign company, about the military uses of beryllium alloys or any other alloys, either in the United States or in Germany, and particularly when he is not an official of the company that he is supposed to represent.

The CHAIRMAN. Of course, he testified that the whole business had been transferred by Siemens to—

Mr. GAHAGAN. That is not so.

Mr. Cox. I think—I don't believe that Dr. Kertess really meant to create quite that impression. I think what he meant to say was that they transferred—Siemens had transferred—to his company the production of the pure beryllium metal. His company does not engage in the production of alloy at all.

The CHAIRMAN. Then I misunderstood him.

Mr. GAHAGAN. This is pure beryllium metal [handing the chairman a small cube of metal].

Mr. Cox. Do you have any information about the United States?

Mr. GAHAGAN. The only use for pure beryllium metal is "X" Ray windows.

The CHAIRMAN. Of course pure-beryllium metal is not used in airplanes, I suppose?

Mr. GAHAGAN. No, no.

The CHAIRMAN. But his testimony was quite direct and distinct upon that point, as I recall it.

Mr. GAHAGAN. As I said—

The CHAIRMAN (interposing). That the metal even in the alloyed form is not now being used in Germany for the manufacture of airplanes. Now on what do you base your testimony?

Representative REECE. May I just interject there, Senator? Have you sold any beryllium or beryllium oxide to Siemens & Halske, either last year or this year, and, if so, how much?

Mr. GAHAGAN. I sold them over 10,000 pounds last year and 2 or 3 thousand pounds this year to date, so I know that they are in production.

Representative REECE. That is beryllium oxide?

Mr. GAHAGAN. I know they are in production and Dr. Kertess' statements cannot, ipso facto, be true.

The CHAIRMAN. What are they using the beryllium for, do you know that?

Mr. GAHAGAN. You see my arrangement with them covers normal commercial uses. I naturally, when I am in Germany, do not ask Dr. Rohn direct questions or Siemens, about military uses, because if I did they wouldn't tell me; and, on the other hand, if we were working with anything with the American Government, which we are, I wouldn't inform Dr. Rohn, if he were to ask me, and he would have good enough manners not to ask me.

The CHAIRMAN. I wasn't thinking about military uses. I have flown in planes many times, but never in a military plane, so I am

thinking of the commercial development. Now, what do you know about the commercial development of airplanes in Germany?

Mr. GAHAGAN. As far as I know, sir—

The CHAIRMAN (interposing). Through the use of beryllium?

Mr. GAHAGAN. The only thing I know is really what I have picked up here and there in Germany. No direct statements to me. The beryllium nickel is, I understand, being used—I went over the list yesterday—for valve springs, beryllium copper for fuel-oil lines, for altimeters, for speed controls, for cowl hinges—I am naming all the uses here in the United States as well. I have submitted to the committee a list of known uses.

The CHAIRMAN. Have you personally any knowledge of its having been used for the construction of fuselages?

Mr. GAHAGAN. No, sir; not beryllium.

The CHAIRMAN. You spoke of its capacity to withstand vibration. Now you meant in that connection in the engine and in these other parts?

Mr. GAHAGAN. Particularly in the springs. I will say there is a lot of development work going on though for fuselage.

Mr. HENDERSON. Mr. Chairman. (To Mr. Gahagan:) Didn't I understand yesterday that you said the beryllium alloy had been used in 15,000 bushings for airplanes, up to about 2 years ago, and didn't I understand Dr. Kertess to corroborate that for use in a certain Pratt & Whitney airplane on the Hamilton Standard propeller?

Mr. GAHAGAN. I do know that 15,000 of those bushings were sold. I don't know whether it was to the German Government or not, or all military, but 15,000 were used and I do know that none of them ever failed.

Mr. HENDERSON. Have you had any experience with other governments similar to the one you had with the British?

Mr. GAHAGAN. Yes; with the French, and I understand the Italians are quite interested in beryllium.

Mr. HENDERSON. Have you asked about that, Mr. Cox? Would it embarrass you to tell us about the French experience?

Mr. GAHAGAN. No; not some of it. You mean embarrass—

Mr. HENDERSON. What is the situation? Are there French patents, or are they using yours?

Mr. GAHAGAN. The situation is that the French are really using our patents and Siemens in France at the present time—I will describe that. Some few years ago the Germans were complaining because the French apparently were infringing on our patents and on their patents in France, and they were thinking about starting a suit against the French. I told them that I would rather talk to the French because I considered probably it would be foolish to sue a French company in a French court, particularly for the Germans to do it, so I called on the largest metal company in France—that is, in the nonferrous-metal business—and I immediately saw the managing director. I told him that I understood he was in the beryllium business and I wanted to know if I could help him in any way, that I believed in cooperating with everyone I could who was seriously interested in the beryllium business.

He was rather surprised at that, in view of the fact that he is infringing our patent, and he told me that some 2 years before they had realized that beryllium had tremendous military importance for the future and that they decided as the largest French company that it was up to them to go into the business of producing beryllium, and that they had approached the Germans and 2 years had elapsed before they had gotten a reply to the letter, and they decided the only way to arrive at any kind of a deal with the Germans or with us either is to go ahead and infringe our patents, and said, "Then, of course, if you sue, why we will keep the case in the court for 20 years and then if you win the suit, why the French Government will pass some kind of law taking all royalties or damage fees which a foreign company gets for certain types of suits, so you will never get anything."

And I said, "In that case I think the thing to do is to cooperate with you, and particularly in France, because if you have American patents or German patents, why they will probably be very good, and we cannot act that way in the United States or in Germany. Our patent laws are a little more rigid than that."

I further told him that I had found Siemens the most wonderful crowd of people to deal with I had ever known in my life. That both as a company and all the personnel with whom I had been in contact, that I had found them, over the experience that I had had, willing to divulge and anxious to divulge everything that they had to us and cooperate with us in every way; that is, divulge technical information, possible commercial applications, or anything else that had to do with helping the beryllium business along and that I strongly advised them to work out something with the Germans. They told me they were delighted to know the Germans were really like that, that they hadn't had that opinion of them before.

Well, the result of that was that I finally got the Frenchmen and the Germans together, and I left some 2 or 3 years ago, thinking that everything was all arranged. A contract was practically drawn up when I left for the United States, and when I was over last year I found they were still arguing about the situation, and finally after spending several days in Paris, why, we arrived at a definite contract. The contract calls for the French operating in France, Switzerland, and Belgium, taking over any of our patents and turning over any of their patents to us in America, and they agreed to stay out of North and South America and stay out of our territory.

Mr. HENDERSON. When you say "our" you mean Siemens and yourself?

Mr. GAHAGAN. Yes.

Mr. HENDERSON. So there was a partition, then?

Mr. GAHAGAN. It sounded like a partition of countries.

POLICY OF EXCLUSION FROM BERYLLIUM FIELD

Mr. Cox. One question I would like to ask, Mr. Gahagan, and then I think I will finish. In response to the chairman's question a moment ago you described hindrances which you thought existed in the development of beryllium. I would like to ask you whether, in your opinion, from the point of view of developing the greatest possible use of the material, it is desirable to exclude any company

in this country from operating in any particular field in the manufacture of products.

Mr. GAHAGAN. Do you mind going over that again?

Mr. COX. I will put it this way: Do you think that any step should be taken to exclude a particular company from entering any special field of manufacture? Is such a step designed to promote the use of beryllium?

Mr. GAHAGAN. No; there isn't a step taken to exclude a particular company, constructively.

Mr. COX. Just what do you mean by "constructively"?

Mr. GAHAGAN. I consider, for example, if someone came in and offered a price of beryllium at \$1 a pound, that wouldn't be constructive.

Mr. COX. Well, the situation that I am interested in in this respect is the situation I asked you about awhile ago in connection with the Mallory Co. Now, there you used your patent—your own patents, and your relations with the German company, did you not, to prevent the Mallory Co. from going into production of any beryllium products except those which they were already producing?

Mr. GAHAGAN. That referred more to their going into the beryllium business in England.

Mr. COX. Well, I have here a letter which you wrote Dr. Rohn, dated September 13, 1937, in which you say:

We still feel that Mallory are the best people for us to work with in the electrical field; but in view of their recent actions, are quite certain that we should be careful and force them to confine their efforts to their present business.

Mr. GAHAGAN. Yes; because at that time they were talking about, or wanted to go into, the fabrication of various beryllium alloys; they said they might; they were trying to get a vacuum equipment from Germany, or build one, and we had already had enough trouble.

Mr. COX. You mean you had had enough trouble with other people producing beryllium alloys?

Mr. GAHAGAN. Yes; trouble getting along and getting beryllium out and widely used.

Mr. COX. Then I take it you think it is not a good thing to have too many people producing the master alloy?

Mr. GAHAGAN. In the initial stages that is true. I think two or more companies is a very good combination.

Mr. COX. But to get beyond two you think that is, perhaps, too many?

Mr. GAHAGAN. Perhaps.

Mr. COX. At least you felt that in this situation you were justified in taking or bringing very definite pressure to bear on the Mallory Co. to prevent them from going into the manufacture of the alloy?

Mr. GAHAGAN. Yes.

Mr. COX. And you still think that that is economically a wise attitude?

Mr. GAHAGAN. Yes; I think so. I can understand the American Brass Co. wanting two sources of supply. I mean after all we may have a fire or something. They must either do that or carry rather large stocks to protect themselves. We have never objected to other people being in the beryllium business if they will pay some attention

The CHAIRMAN. Have you ever objected to Mallory buying beryllium from any other source?

Mr. GAHAGAN. We prefer actually that they buy from us; yes.

The CHAIRMAN. Well, isn't it a little bit more than preference? You have a contract?

Mr. GAHAGAN. No; we haven't any contract.

The CHAIRMAN. What is the arrangement?

Mr. GAHAGAN. Just an understanding. We have talked about contracts from time to time, but we never have gotten any.

The CHAIRMAN. Do you remember the testimony of Mr. Hensel yesterday?

Mr. GAHAGAN. I wasn't here, but that is all right; whatever he said it is all right by me.

Mr. COX. Is it still the policy of your company to use your connections with the German interests to prevent companies like the Mallory Co. in this country from going into the production of the master alloy?

Mr. GAHAGAN. I hadn't thought about it as a policy before.

Mr. COX. You did it in one instance at least.

Mr. GAHAGAN. It wasn't to prevent Mallory from going into the production of the master alloy. They had no thought of going into the production of the master alloy.

Mr. COX. Perhaps I misunderstood you a moment ago. What were they considering doing that made you say they should be forced to confine their efforts to their present business?

Mr. GAHAGAN. They were talking about making a lot of nickel-beryllium alloys, what I term trick alloys, which is just what we expected to do and why we put in the fabricating equipment. As I stated before, our primary purpose of putting in the fabricating equipment was to make nickel alloys which are difficult to make and which can't be made with the existing equipment and for which we had to have specialized equipment which we have imported from Germany.

Now, Dr. Hensel is from Germany and is thoroughly familiar with all that equipment and naturally I didn't want to see them starting off and doing the same thing we were doing. I had been through the experience of putting our beryllium copper through other people, and I don't want to duplicate that in the nickel field. I wanted to be able to put out nickel beryllium and put the finished price on it at whatever we wanted it to be, and we are going to put it as low as we can.

Mr. COX. Well, insofar as these nickel alloys are concerned, is it still your policy to use your connections with the German interests to prevent others from going into the production of those alloys?

Mr. GAHAGAN. Well, I use my connection with the German interests; I will use the patents as nearly as I can.

Mr. COX. That was a little more—

Mr. GAHAGAN (interposing). Well, that was a particular case that won't arise everywhere.

Mr. COX. I think I have finished.

The CHAIRMAN. Do any members of the committee desire to ask any further questions?

Mr. O'CONNELL. I should like to ask one question. Mr. Gahagan, I understand from what you said the real reason for your going into the fabricating business is because The American Brass Co. has not in the past, at least, been successful according to your way of thinking in pushing the development or the sale of fabricating products. So that in this field you are going into competition with the American Brass Co. in the production of fabricated products?

Mr. GAHAGAN. That is right.

Mr. O'CONNELL. The reason for going into competition is because you do not have a satisfactory outlet?

Mr. GAHAGAN. We have nothing else to do. Here we were. We couldn't increase the sale of beryllium copper because the more we reduced the price the higher the price of the finished product went, and we have—my testimony here is exactly what I have been talking to The American Brass officials for years. I don't blame them from their point of view. Beryllium probably has been a nuisance to them. It requires specialized technique in fabricating it, and if I were in their position I'd probably do exactly what they have done, but that didn't help me in the beryllium business, and so the only thing we could do, as I could see it, was to get into the fabrication ourselves; otherwise we might have a situation that anyone might offer beryllium at \$5 a pound, we'd have to meet it, and the volume of business wouldn't increase any by reducing it to \$5 because there are only two customers and, if they keep the price of the finished product up it isn't going to increase the sale of beryllium 1 pound; as a matter of fact it hasn't increased as over the last 2 or 3 years.

Mr. O'CONNELL. What you are saying is that, due to the fact that The American Brass Co. isn't going out of business, you are not satisfied with the policies of The American Brass?

Mr. GAHAGAN. No; I am delighted to listen here and hear the testimony that they are thinking of reducing the price by the equivalent amount of the price of beryllium from \$23 to \$15. That does us a lot of good. It will increase the use of beryllium copper.

Mr. O'CONNELL. But on the record before you today you said you were far from satisfied with the policies of The American Brass Co.

Mr. GAHAGAN. That is right; but I am satisfied that—I want to cooperate with them if we can.

Mr. O'CONNELL. I don't think I made myself clear. I will repeat it. You have been of the opinion that the policy of The American Brass Co. in the past has not been such as would promote the extensive use of the product.

Mr. GAHAGAN. Their previous policy.

Mr. O'CONNELL. That is right; up until now.

Mr. GAHAGAN. That is true, but they probably had very good reasons for it, and I'd probably have done the same thing if I had been in their shoes.

Mr. O'CONNELL. But the reasons probably had to do with other interests that The American Brass had.

Mr. GAHAGAN. And the fact that it is difficult for them to fabricate it in small lots, and it has undoubtedly cost them a lot of money.

Representative REECE. After you reduced your price to \$25, did The American Brass Co. make any complaint to you about the cost of the

beryllium or suggest the further reduction during this period when they were negotiating with the Brush Corporation?

Mr. GAHAGAN. We had no knowledge whatsoever. I have sat here and been rather surprised at that, too, that here we have spent years working on beryllium. We introduced the subject of beryllium to American Brass. I wanted to take issue with Mr. Judd when he tells me that their metallurgist helped us. Quite the reverse; everything that they knew about beryllium copper we taught them. For them then to consult with a competitor of ours who hasn't had the experience that we have had, who hasn't had to go through all the grief we have had to go through, is rather amazing, has been rather amazing to me. After all, they might at least have called us up and said, "Now, we are thinking about lowering the price of our fabricated products. How much can you lower the price of beryllium?" We have definitely gone to The American Brass on repeated occasions and said, "We'd like to discuss with you what you think the volume of business would be at the different price levels," and we have never gotten an expression of opinion, because we have always been interested in getting the widest use of beryllium copper possible—of course, that is the only thing in a policy like that that would make any sense to us.

The CHAIRMAN. But you are clearly of the opinion that the price could be much lower with benefit to the industry?

Mr. GAHAGAN. Yes.

The CHAIRMAN. I mean of the fabricated products.

Mr. GAHAGAN. Yes. I don't know, of course, what their fabricating costs are. I don't know; if they bought beryllium at \$5 a pound they might still lose money. I don't know that, but I believe it can be lowered materially.

The CHAIRMAN. And you intend to try to do that?

Mr. GAHAGAN. We intend to fix our prices at what we think they should be. I am talking about finished prices. We hope the American Brass won't come along and put some price way below that; but if they do, they are going to stimulate the business and we are going to share in it.

The CHAIRMAN. Are there any other questions?

Mr. Cox. Mr. Gahagan, you prepared this list, I believe, of proposed applications of beryllium copper.

Mr. GAHAGAN. I think you made that digest.

Mr. Cox. That is a digest from a list you prepared. Do you have any objection to this going in the record?

Mr. GAHAGAN. No.

The CHAIRMAN. It may be received for the record.

(The list referred to was marked "Exhibit No. 502" and is included in the appendix on p. 2296.)

Representative REECE. As I recall Dr. Sawyer's testimony, he rather intimated that the Beryllium Corporation had threatened him with suits. I thought that ought to be discussed, because that carries a bad significance, where your testimony has rather indicated that you did get in touch with Dr. Sawyer with a view of discussing—

Mr. GAHAGAN (interposing). This was before he was in the metal business.

Representative REECE. With a view of promoting the industry.

Mr. GAHAGAN. That was before he was in the metal industry, and I told Dr. Sawyer if he ever got into metal production, or invented anything, I would be very glad to discuss licensing with him or working with him, and that offer still stands. I make it public.

I am glad you brought up one point, though. Dr. Sawyer made a statement here in his testimony to which I wish to take exception, and that is a statement that Dr. Rohn threatened him and tried to get him to get into some kind of combination with us, or do something. That whole interview came because Dr. Sawyer wrote Dr. Hessenbruch, in Hanau-am-Main, in Germany, and told him he understood he was coming to America and he would like very much to see him. A reply was written to Dr. Sawyer, saying that Dr. Rohn was coming over, and that he would see him. When Dr. Sawyer saw Dr. Rohn, he indicated to Dr. Rohn that if he was not entirely satisfied with the relationship which he had with the Beryllium Corporation, he would like to discuss with him taking over the German patents in the United States, and that was the purpose, apparently, of the whole interview. And Dr. Rohn told him that he was quite well satisfied, and that if he infringed on the German patents, if we didn't do anything about defending them the Germans would. Dr. Rohn gave me a complete copy of a memorandum of that conversation. I want to get that in the record.

The CHAIRMAN. If there are no further questions, Mr. Gahagan, we are very much indebted to you, and you may stand aside.

Mr. Cox. I should like to state for the record before you conclude, Mr. Chairman, that that list of proposed applications of beryllium copper just introduced into the record is a list prepared by the Beryllium Products Corporation. That is correct; is it not?

Mr. GAHAGAN. Yes.

The CHAIRMAN. I feel it is only proper that before closing this hearing I should express my own very great satisfaction with the manner in which it has been handled by Mr. Cox and Mr. Borkin and the staff of the Justice Department. I think we all feel that we have been very fortunate to have the benefit of the splendid preparation that you made and the benefit of the excellent manner in which you conducted the hearing.

The committee will stand in recess until 10:30 tomorrow morning.

(Whereupon, at 5:35 o'clock, a recess was taken until Wednesday, May 10, 1939, at 10:30 a. m.)

APPENDIX

EXHIBIT No. 294

[Prepared under direction Mr. John T. Flynn]

Chart 1 - PRODUCTION OF MONEY INCOME
CONSUMPTIVE INDUSTRIES

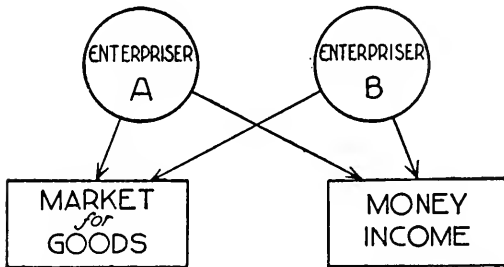


EXHIBIT No. 295

[Prepared under direction Mr. John T. Flynn]

Chart 2 - PRODUCTION OF INCOME
CONSUMPTIVE AND INVESTMENT INDUSTRIES

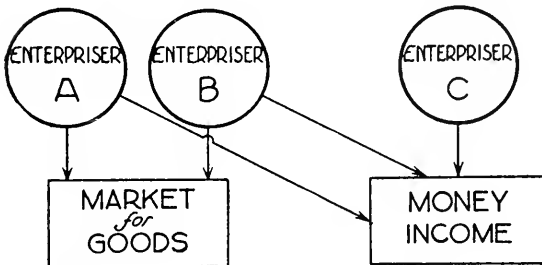
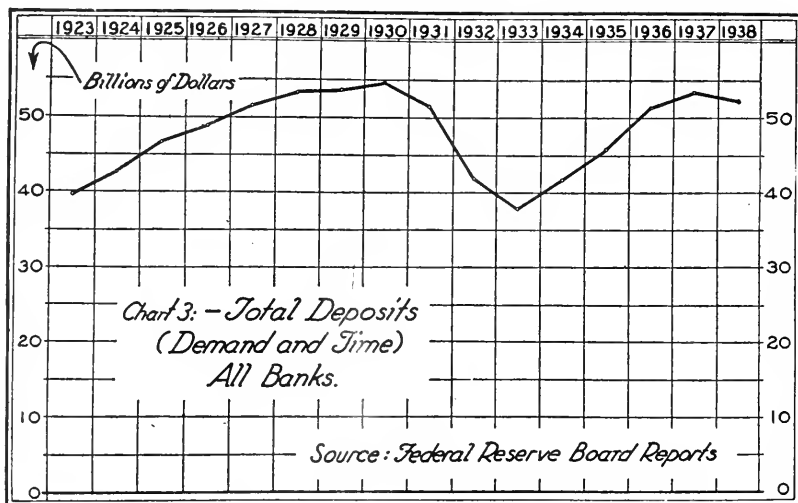


EXHIBIT No. 296

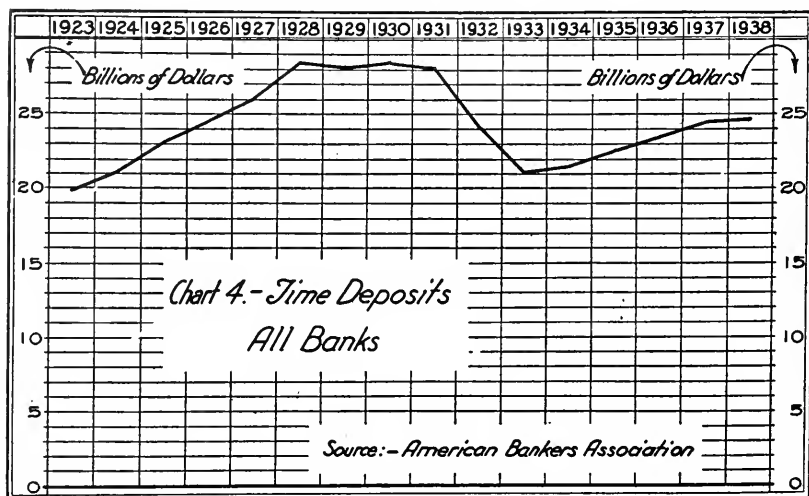


Deposits (time and demand)—All banks (Federal Reserve Board)

[Millions of dollars]

1923.....	\$39, 983	1931.....	\$51, 782
1924.....	42, 903	1932.....	41, 963
1925.....	46, 715	1933.....	37, 998
1926.....	48, 826	1934.....	41, 870
1927.....	51, 662	1935.....	45, 766
1928.....	53, 398	1936.....	51, 335
1929.....	53, 852	1937.....	53, 287
1930.....	54, 954	1938.....	52, 196

EXHIBIT No. 297

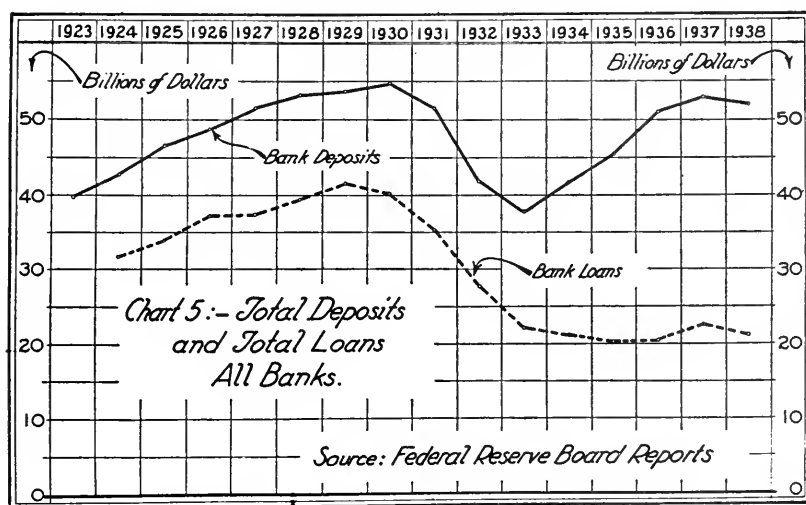


Time deposits—All banks (American Bankers Association)

[Millions of dollars]

1923.....	\$19, 927	1931.....	\$28, 220
1924.....	21, 189	1932.....	24, 281
1925.....	23, 134	1933.....	21, 126
1926.....	24, 696	1934.....	21, 753
1927.....	26, 091	1935.....	22, 652
1928.....	28, 413	1936.....	23, 464
1929.....	28, 218	1937.....	24, 493
1930.....	28, 479	1938.....	24, 626

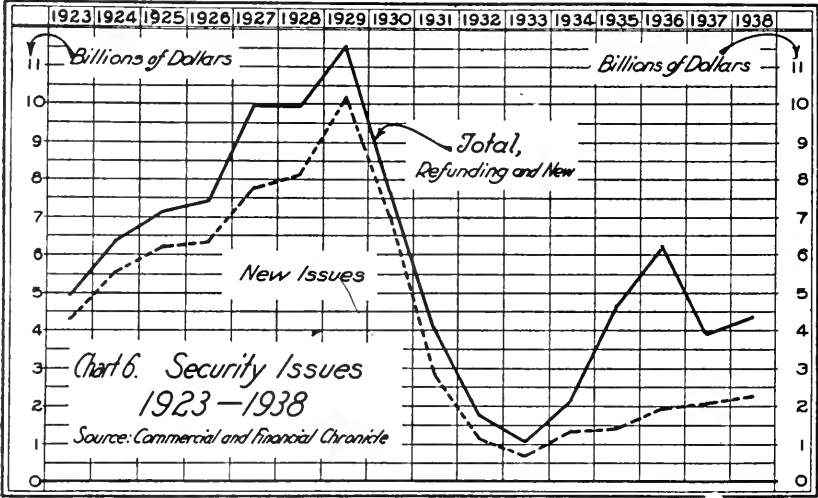
EXHIBIT No. 298

*Bank loans—All banks (Federal Reserve Board)*

[Millions of dollars]

1924.....	\$31, 541	1932.....	\$27, 834
1925.....	33, 882	1933.....	22, 203
1926.....	37, 176	1934.....	21, 287
1927.....	37, 387	1935.....	20, 272
1928.....	39, 483	1936.....	20, 679
1929.....	41, 531	1937.....	22, 514
1930.....	40, 038	1938.....	21, 130
1931.....	35, 384		

EXHIBIT No. 299



Capital issues (Commercial and Financial Chronicle)
[Millions of dollars]

	Total	New		Total	New
1923.....	\$4,989	\$4,304	1931.....	\$4,038	\$2,860
1924.....	6,352	5,593	1932.....	1,751	1,165
1925.....	7,126	6,220	1933.....	1,063	708
1926.....	7,430	6,344	1934.....	2,160	1,386
1927.....	9,993	7,791	1935.....	4,669	1,409
1928.....	9,991	8,114	1936.....	6,214	1,949
1929.....	11,513	10,182	1937.....	3,939	2,096
1930.....	7,677	7,023	1938.....	4,375	2,297

EXHIBIT No. 300

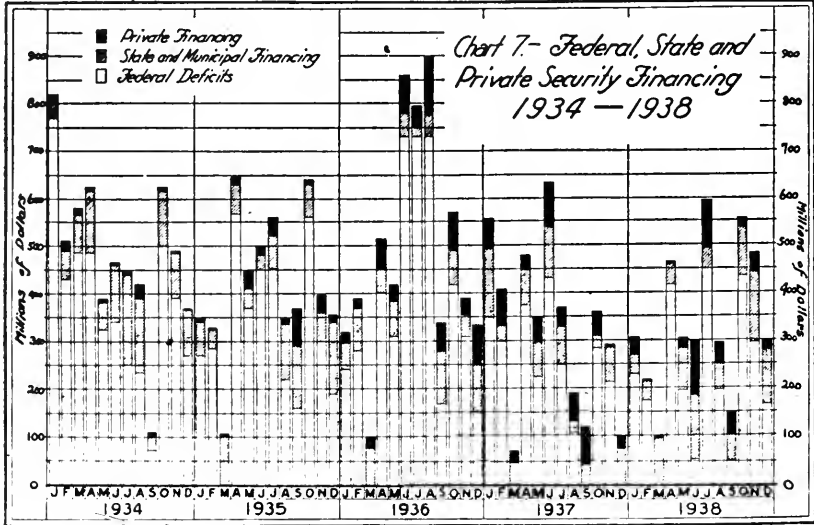
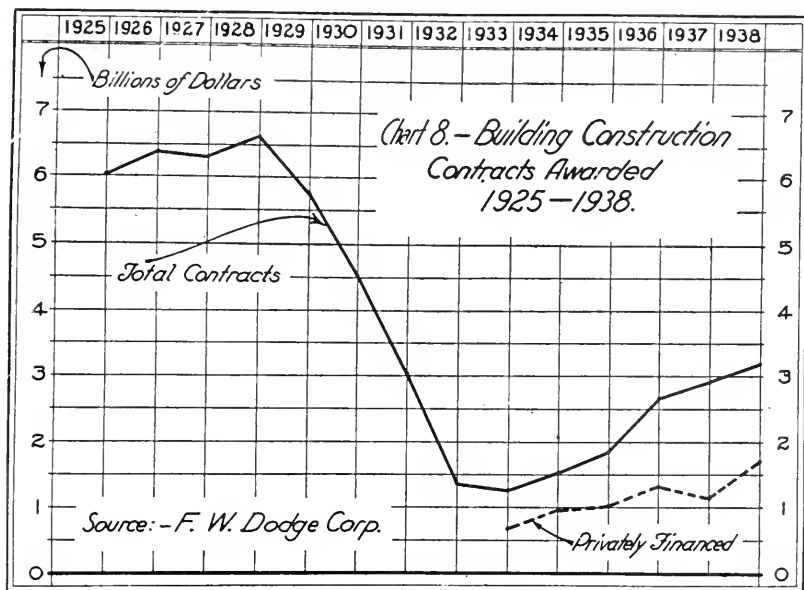


EXHIBIT No. 301



Building construction—Contracts awarded (F. W. Dodge Corporation)

[Millions of dollars]

	Total	Privately financed		Total	Privately financed
1925.....	\$6,006	.....	1932.....	\$1,351	.....
1926.....	6,380	.....	1933.....	1,250	\$683
1927.....	6,303	.....	1934.....	1,543	975
1928.....	6,628	.....	1935.....	1,845	1,007
1929.....	5,750	.....	1936.....	2,675	1,334
1930.....	4,523	.....	1937.....	2,913	1,152
1931.....	3,002	.....	1938.....	3,191	1,706

"EXHIBIT No. 302," introduced on p. 1713, appears in Hearings, Part II, appendix, p. 802.

"EXHIBIT No. 303," introduced on p. 1713, appears in Hearings, Part II, appendix, p. 804.

"EXHIBIT No. 304," introduced on p. 1713, appears in Hearings, Part IV, appendix, p. 1645.

"EXHIBIT No. 305," introduced on p. 1726, is on file with the Committee.

EXHIBIT No. 306

STATEMENT REGARDING RESALE PRICE MAINTENANCE MADE IN FEDERAL TRADE COMMISSION REPORT TO CONGRESS ON JANUARY 30, 1939

The five preceding sections of this chapter have presented an outline of the principal provisions of proposed legislation, together with a brief summary of certain opinions expressed by proponents and opponents as to the probable effects of resale price maintenance of the type outlined in the proposed legislation on the interests of manufacturers, wholesalers, retailers, and consumers. In the absence of definite experience with legalized resale price maintenance, it seems impossible to form conclusions with certainty as to what the effects of fixing and maintaining resale prices would be on each of the three interests concerned, particularly with respect to many of the points discussed above regarding which information of a statistical nature is difficult or impossible to obtain. It seems probable, however, that the results would lie somewhere between the extremes of often conflicting opinions expressed by proponents and opponents.

Those holding all shades of opinion generally agree that dealer price cutting, if severe and long continued, may result in loss of distribution outlets and, possibly, of volume to the manufacturer if loss of dealer outlets results in lessened accessibility of goods to the consumer that counterbalances any tendency for the reduced prices to increase consumption. No instance, however, has yet been brought to the Commission's attention in which there was conclusive evidence that an article of real merit has been driven off the market by price cutting alone.

Legalization of the resale-price-maintenance contract, the use of which would be optional with the individual manufacturer, would place in the hands of the producer who chose to use it a means of controlling price cutting that he does not now possess.

Three questions, however remain for his decision before attempting its use: The first is whether resale price maintenance would be applicable to the product or products he makes and the distribution agencies he uses. The second is whether its application would actually produce the expected condition of dealer satisfaction and support. The third is whether the additional expense of assuming merchandising functions and policing that might be required to make maintenance of resale prices effective would necessitate higher prices to the consumer that might put his products under a competitive handicap with those of nonprice maintainers making the same or similar goods.

Opinions of manufacturers as to the expediency of applying resale price maintenance to their products vary so widely that it does not seem at all probable that all competing manufacturers in any line would attempt to use it.

It is quite generally agreed among distributors that whether, under normally existing conditions of varying expenses, resale price maintenance would be a hindrance to any given type of merchants would depend upon the care exercised by the manufacturer in classifying his dealers, the effectiveness of his efforts to keep his distribution in the hands of those types he wishes to use, and the price levels fixed and maintained for his products.

Some merchants who have given thought to the subject appear to be of the opinion that regardless of any efforts that may be made to maintain varying price levels for a given article to cover varying services and expenses of different types of dealers, the tendency will be for the greater part of the total volume of the article sold to pass through the hands of the type of dealer having the lowest maintained resale price in any given market.

Briefly summarized, against the claimed advantages for a dealer, such as greater stability of prices; absence of price competition; protection of established types of dealers and, in some cases, higher prices, there are to be set the equally strongly claimed disadvantages of loss of ability to conduct his business as he sees fit; inability to price according to his own costs or according to the service needs or desires of consumers; inability either to return or to dispose of slow-moving or distress stocks; fixed prices and margins in times of advancing or falling prices; the possibility that margins allowed by the manufacturer may be too narrow; and a generally throttling effect upon the free competitive development by trial and error of new methods of distribution.

There appears to be, further, quite general agreement that the resale-price-maintaining manufacturer would be in a position to control his prices and channels of distribution in a way that he cannot do today, but some feel that such domination of the situation would be purchased at the expense of assuming distribution functions and the responsibility for making decisions of vital import not only to his own business but also to distributors and to consumers of his goods.

In any case its expediency from the manufacturer's viewpoint would be limited by the type of product, the distribution agencies used, and, particularly, by the degree of manufacturing competition to be met.

Whether the consumer's interest would be injured depends on the extent to which prices might be permanently maintained on levels higher than they would otherwise be.

Opponents of resale price maintenance point out that although price cutting may be unfairly used by financially strong distributors to force out weaker competitors, with consequent loss of dealer outlets and volume of sales by manufacturers whose brands are thus cut in price, it is by no means clear that resale price maintenance can be so applied as to correct evils of undesirable dealer competition without doing even greater injury by interfering with dealer competition that really serves the interests of the public.

Fears expressed regarding its effects are of two sorts. Some feel that resale price maintenance, if ineptly or shortsightedly applied, might tend to result in low or inadequate dealer margins, particularly if supported by extensive consumer advertising campaigns that tend to create consumer demand that forces dealers to handle goods. Others, including many consumers who fear price enhancement, feel that it might, in the hands of interested manufacturers and distributors, be made a part of schemes to enhance prices and profits, protect inefficient dealers, and otherwise interfere with dealer competition regarded as serving the public interest.

The result is the suggestion, frequently made by consumers and less frequently made by both proponents and opponents among manufacturers and distributors, that if resale-price-maintenance contracts were legalized, the right should be exercised only under governmental supervision as to the fairness to all parties concerned of prices so fixed and maintained.

Wartime Government price fixing developed the fact that, even under the atmosphere of wartime unified effort, Government regulation of prices in the field of distribution involved the consideration of distribution costs as bases for wholesale and retail margins and prices that would insure the economical distribution of products.

Wartime dealer price control did not succeed in establishing a check on undue price enhancement in any sense equivalent to normal competition, and affected only a limited number of commodities, largely necessities. But the experience of the Federal Trade Commission, which was to some extent interested in this work, as the general wartime cost finding agency of the Government, indicated the extremely complicated and delicate nature of such regulation.

Governmental supervision of the fairness of prices fixed and maintained by manufacturers under resale-price-maintenance contracts would present similar problems, with even greater practical difficulties, with respect to wholesale and retail distribution expenses and margins and for a much more varied list of trade-marked or branded articles.

The list would include, apparently, both consumers' luxuries and necessities as well as many other commodities required in production and distribution, though the number of articles might be limited to a considerable extent by the terms of the law legalizing resale-price-maintenance contracts, or by the unwillingness of manufacturers of many such trade-marked products to maintain resale prices by contract.

The resulting agency would be charged with the responsibility of determining the "fairness" of prices to all parties concerned, but particularly with respect to wholesale and retail margins and prices.

Judgment as to the fairness or reasonableness of margins allowed would necessitate especially the determination of wholesale and retail expenses for a large number of trade-marked articles handled by different types of dealers of varying individual efficiency and using different methods of distribution under varying local conditions.

All these factors tend to make very difficult, if not impracticable, the determination of a single margin applicable to all dealers handling any particular article or brand that would be "fair" to dealers and to consumers generally.

During the war it was found, with respect to even so homogeneous a commodity as coal, that each locality presented such varying problems as to dealer expenses that the determination of retail margins for each local market that were "fair" alike to dealers and to the public became practically a separate and distinct problem in price regulation to be handled by local price-control agencies.

Wartime experience in the nation-wide policing of prices of a limited number of commodities, therefore, would seem to indicate that the effective policing of resale prices for a large number of trade-marked articles would require extensive knowledge of dealer expenses for specific commodities to serve as the logical bases for judgment as to the fairness of prices.

The accurate determination, or even the close estimation, of such expenses for a multiplicity of products would seem to be too great an undertaking to be practicable and would involve expanding the administrative organization to a prohibitive size.

Moreover, the problem of regulation might be so pressing, as well as complicated, that action would be either so slow, or necessarily based on such partial and insufficient information, as to make Government regulation unsatisfactory to those desiring resale-price maintenance and also a poor substitute for dealer competition from the point of view of the consumer.

Effective governmental supervision of prices maintained by contract, therefore, would seem to be not only a thing that the majority of businessmen do not desire, but also a method involving very great, if not insurmountable, practical difficulties. Under resale-price-maintenance without Government regulation competition among manufacturers would be the only remaining regulator of consumer prices with respect to price-maintained articles.

Whether the adoption of such a policy would be either desirable or expedient hinges upon whether, in the long run, the expenditure of the consumer's income under a system of unregulated resale-price maintenance would yield a greater degree of satisfaction of his wants than is obtainable under present conditions of freedom of dealer price competition.

The real crux of the question, therefore, is whether injury done to the consumer's interests through the elimination of dealer competition with respect to price-maintained articles would be greater than the damage now alleged to be done to the interests of manufacturers and distributors of trade-marked, nationally advertised brands when they are used as leaders. Neither injury is capable of exact measurement, but, in the opinion of the Commission, the potential damage to consumers through price fixing would be much greater than any existing damage to producers through this form of price cutting.

EXHIBIT No. 307

December 12, 1938: Containers—Metal—Closure Parts—Patent Licenses.
(FTCA-5) American Flange and Manufacturing Company, Inc.
(Ca-3) Docket No. 3391.

STATEMENT OF FACTS

The American Flange and Manufacturing Company was an Illinois corporation with its principal office in [144-Bb] Chicago, Illinois, and manufactured and sold "Tri-Sure" closure parts and seals for metal containers, such as oil drums. These closure parts consisted of a threaded flange and a metal plug fitting into the flange. These products were manufactured and sold by this company to numerous metal-drum manufacturers, who applied them to the drums to provide an opening through which the drum might be filled and emptied, and a stopper for such opening. The containers usually were sold by the manufacturers to concerns which filled them with oil, paint, and other liquid products marketed by the latter. The seals were used to seal the closure parts against tampering, leakage, etc., and were sold by the American Flange and Manufacturing Company largely to filler customers who purchased the drums from the drum manufacturers.

MONOPOLISTIC PRACTICES

The American Flange and Manufacturing Company held patents on these flanges, plugs, and seals, as well as patents on them as used in combination with metal drums. It also held patents on certain dies and tools which were used in applying "Tri-Sure" closure structures and sealing caps to metal containers. These dies and tools [144-Cc] were leased by this company to purchasers of its closure parts.

The American Flange and Manufacturing Company pursued a policy of soliciting both drum manufacturers and filler customers, buying its closure parts, to enter into a so-called license and service agreement. This agreement licensed these customers to use the patented tools and dies in applying "Tri-Sure" closure parts to metal containers. In consideration of this license for the use of such tools, the customer acknowledged the validity of the American Flange Company's patents on applying tools and dies and agreed not to infringe or contest such patents. These provisions of the agreement were not challenged by the Commission's complaint, findings, or order.

However, the terms of the agreement in question also required the customer buying "Tri-Sure" closure flanges and seals outright as an ordinary purchase and sale transaction, to acknowledge the validity of the patents under which such products, so sold, were manufactured by the American Flange and Manufacturing Company, and such customer entering into the agreement was bound by it not to infringe or contest such patents. [144-Dd] In addition to the patents which this company relied on in protecting its manufactured closure structures; there were included among the patents enumerated in the agreement patents which it owned but did not use in the manufacture of its closure parts, as well as patents on combinations of its closure parts with metal drums, and pending patent applications on which no patents had been issued. The agreement listed about 50 patents and 15 patent applications altogether.

In the agreement, the American Flange and Manufacturing Company agreed to indemnify customers against suits for infringement arising from their use of its products which might be instituted against them.

EFFECT

The Commission found that the effect of such use of this company's policy of using its licensing and service agreements may have been to induce purchasers to buy "Tri-Sure" products to an extent which they might not have done in the absence of such agreements, and to lessen the sale of competing products; to obtain from customers acknowledgment of the validity of and an agreement not to infringe or contest certain patents [144-Ee] and patent applications owned by the American Flange and Manufacturing Company, without assurance as to their validity or without the means of obtaining such assurance; to obtain from customers an acknowledgment and agreement not to infringe or contest the validity of patents which this company owned but did not use or rely on in the manufacture and sale of its products, to induce customers to accept a license under its patents for closure parts, some of which were sold outright by the American Flange and Manufacturing Company, with knowledge that they were to be used in metal containers by the purchasers and to induce purchasers to assist the company in making more effective its monopolies under such patents.

The Commission concluded that the American Flange and Manufacturing Company's use of the agreement, insofar as it required customers to acknowledge the validity of, or to agree not to contest or infringe, patents covering products sold outright by respondent to its customers, pending patent applications and patents which it did not use in connection with the manufacture and sale of such patents, was an unfair method of competition in violation of Section 5 of the Federal Trade Commission Act.

The Commission, in issuing its order, took the position that the sale of this company's patented articles to its customers was to be distinguished from [144-Ff] the leasing of its patented applying tools to them. The Commission considered that, while conditions may be imposed by a patent holder in connection with the transfer of a patent right, such as a license to use or make an article under a patent, the patent laws do not authorize the imposition of restrictions around the sale of a patented article, where the effect of such restrictions is to restrain trade or lessen competition. The Commission's order does not interfere with the American Flange and Manufacturing Company in licensing others to manufacture its closure parts or in licensing the use of its patented applying tools, but it does not permit the company to induce its customers to accept licenses for the use of patents on products which it sells outright to them.

VIOLATION OF SECTION 3

The American Flange and Manufacturing Company's original license and service agreement further provided that if a customer, during any six months' period, should purchase "Tri-Sure" closures amounting to 80 percent of his total requirements for that period, he would be granted a so-called quantity discount of 10 percent. [144-Gg] This provision was later modified by this company to the following effect:

"We will consider that you have qualified for our quantity discount when at the end of six-month periods you inform us by letter that during the period you have considered our flange and plug your standard, have recommended them to your customers without discrimination, and used them where you could."

It was the Commission's conclusion that these discount provisions violated Section 3 of the Clayton Act, as being the allowance of a discount on a condition which tended to induce purchasers not to deal in competing products.

A copy of the Commission's findings, conclusion, and order to cease and desist is herewith submitted, marked "F. T. C. Ex. No. 81-I."

"EXHIBIT No. 308" is printed as Part 5-A.

EXHIBIT No. 309

ADDRESS OF THE PRESIDENT OF THE UNITED STATES, DELIVERED AT A JOINT SESSION OF THE TWO HOUSES OF CONGRESS, JANUARY 20, 1914

Gentlemen of the Congress:

In my report "on the state of the Union," which I had the privilege of reading to you on the 2d of December last, I ventured to reserve for discussion at a later date the subject of additional legislation regarding the very difficult and intricate matter of trusts and monopolies. The time now seems opportune to turn to that great question; not only because the currency legislation, which absorbed your attention and the attention of the country in December, is now disposed of, but also because opinion seems to be clearing about us with singular rapidity in this other great field of action. In the matter of the currency it cleared suddenly and very happily after the much-debated Act was passed; in respect of the monopolies which have multiplied about us and in regard to the various means by which they have been organized and maintained it seems to be coming to a clear and all but universal agreement in anticipation of our action, as if by way of preparation, making the way easier to see and easier to set out upon with confidence and without confusion of counsel.

Legislation has its atmosphere like everything else, and the atmosphere of accommodation and mutual understanding which we now breathe with so much refreshment is matter of sincere congratulation. It ought to make our task very much less difficult and embarrassing than it would have been, had we been obliged to continue to act amidst the atmosphere of suspicion and antagonism which has so long made it impossible to approach such questions with dispassionate fairness. Constructive legislation, when successful, is always the embodiment of convincing experience, and of the mature public opinion which finally springs out of that experience. Legislation is a business of interpretation, not of origination; and it is now plain what the opinion is to which we must give effect in this matter. It is not recent or hasty opinion. It springs out of the experience of a whole generation. It has clarified itself by long contest, and those who for a long time battled with it and sought to change it are now frankly and honorably yielding to it and seeking to conform their actions to it.

The great business men who organized and financed monopoly and those who administered it in actual everyday transactions have year after year, until now, either denied its existence or justified it as necessary for the effective maintenance and development of the vast business processes of the country in the modern circumstances of trade and manufacture and finance; but all the while opinion has made head against them. The average business man is convinced that the ways of liberty are also the ways of peace and the ways of success as well; and at last the masters of business on the great scale have begun to yield their preference and purpose, perhaps their judgment also, in honorable surrender.

What we are purposing to do, therefore, is, happily, not to hamper or interfere with business as enlightened business men prefer to do it, or in any sense to put it under the ban. The antagonism between business and government is over. We are now about to give expression to the best business judgment of America, to what we know to be the business conscience and honor of the land. The Government and business men are ready to meet each other half way in a common effort to square business methods with both public opinion and the law. The best informed men of the business world condemn the methods and processes and consequences of monopoly as we condemn them; and the instinctive judgment of the vast majority of business men everywhere goes with them. We shall now be their spokesmen. That is, the strength of our position and the sure prophecy of what will ensue when our reasonable work is done.

When serious contest ends, when men unite in opinion and purpose, those who are to change their ways of business joining with those who ask for the change, it is possible to effect it in the way in which prudent and thoughtful and patriotic men would wish to see it brought about, with as few, as slight, as easy and simple business readjustments as possible in the circumstances, nothing essential disturbed, nothing torn up by the roots, no parts rent asunder which can be left in wholesome combination. Fortunately, no measures of sweeping or novel change are necessary. It will be understood that our object is *not* to unsettle business or anywhere seriously to break its established courses athwart. On the contrary, we desire the laws we are now about to pass to be the bulwarks and safeguards of industry against the forces that have disturbed it. What we have to do can be done in a new spirit, in thoughtful moderation, without revolution of any untoward kind.

We are all agreed that "private monopoly is indefensible and intolerable," and our programme is founded upon that conviction. It will be a comprehensive but not a radical or unacceptable programme and these are its items, the changes which opinion deliberately sanctions and for which business waits:

It waits with acquiescence, in the first place, for laws which will effectually prohibit and prevent such interlockings of the *personnel* of the directorates of great corporations—banks and railroads, industrial, commercial, and public service bodies—as in effect result in making those who borrow and those who lend practically one and the same, those who sell and those who buy but the same persons trading with one another under different names and in different combinations, and those who affect to compete in fact partners and masters of some whole field of business. Sufficient time should be allowed, of course, in which to effect these changes of organization without inconvenience or confusion.

Such a prohibition will work much more than a mere negative good by correcting the serious evils which have arisen because, for example, the men who have been the directing spirits of the great investment banks have usurped the place which belongs to independent industrial management working in its own behoof. It will bring new men, new energies, a new spirit of initiative, new blood, into the management of our great business enterprises. It will open the field of industrial development and origination to scores of men who have been obliged to serve when their abilities entitled them to direct. It will immensely hearten the young men coming on and will greatly enrich the business activities of the whole country.

In the second place, businessmen as well as those who direct public affairs now recognize, and recognize with painful clearness, the great harm and injustice which has been done to many, if not all, of the great railroad systems of the country by the way in which they have been financed and their own distinctive interests subordinated to the interests of the men who financed them and of other business enterprises which those men wished to promote. The country is ready, therefore, to accept, and accept with relief as well as approval, a law which will confer upon the Interstate Commerce Commission the power to superintend and regulate the financial operations by which the railroads are henceforth to be supplied with the money they need for their proper development to meet the rapidly growing requirements of the country for increased and improved facilities of transportation. We cannot postpone action in this matter without leaving the railroads exposed to many serious handicaps and hazards; and the prosperity of the railroads and the prosperity of the country are inseparably connected. Upon this question those who are chiefly responsible for the actual management and operation of the railroads have spoken very plainly and very earnestly, with a purpose we ought to be quick to accept. It will be one step, and a very important one, toward the necessary separation of the business of production from the business of transportation.

The business of the country awaits also, has long awaited, and has suffered because it could not obtain, further and more explicit legislative definition of the policy and meaning of the existing antitrust law. Nothing hampers business like uncertainty. Nothing daunts or discourages it like the necessity to take chances, to run the risk of falling under the condemnation of the law before it can make sure just what the law is. Surely we are sufficiently familiar with the actual processes and methods of monopoly and of the many hurtful restraints of trade to make definition possible, at any rate up to the limits of what experience has disclosed. These practices, being now abundantly disclosed, can be explicitly and item by item forbidden by statute in such terms as will practically eliminate uncertainty, the law itself and the penalty being made equally plain.

And the businessmen of the country desire something more than that the menace of legal process in these matters be made explicit and intelligible. They

desire the advice, the definite guidance and information which can be supplied by an administrative body, an interstate trade commission.

The opinion of the country would instantly approve of such a commission. It would not wish to see it empowered to make terms with monopoly or in any sort to assume control of business, as if the Government made itself responsible. It demands such a commission only as an indispensable instrument of information and publicity, as a clearing house for the facts by which both the public mind and the managers of great business undertakings should be guided, and as an instrumentality for doing justice to business where the processes of the courts or the natural forces of correction outside the courts are inadequate to adjust the remedy to the wrong in a way that will meet all the equities and circumstances of the case.

Producing industries, for example, which have passed the point up to which combination may be consistent with the public interest and the freedom of trade, cannot always be dissected into their component units as readily as railroad companies or similar organizations can be. Their dissolution by ordinary legal process may oftentimes involve financial consequences likely to overwhelm the security market and bring upon it break-down and confusion. There ought to be an administrative commission capable of directing and shaping such corrective processes, not only in aid of the courts but also by independent suggestion, if necessary.

Inasmuch as our object and the spirit of our action in these matters is to meet business half way in its processes of self-correction and disturb its legitimate course as little as possible, we ought to see to it, and the judgment of practical and sagacious men of affairs everywhere would applaud us if we did see to it, that penalties and punishments should fall, not upon business itself, to its confusion and interruption, but upon the individuals who use the instrumentalities of business to do things which public policy and sound business practice condemn. Every act of business is done at the command or upon the initiative of some ascertainable person or group of persons. These should be held individually responsible and the punishment should fall upon them, not upon the business organization of which they make illegal use. It should be one of the main objects of our legislation to divest such persons of their corporate cloak and deal with them as with those who do not represent their corporations, but merely by deliberate intention break the law. Business men the country through would, I am sure, applaud us if we were to take effectual steps to see that the officers and directors of great business bodies were prevented from bringing them and the business of the country into disrepute and danger.

Other questions remain which will need very thoughtful and practical treatment. Enterprises, in these modern days of great individual fortunes, are oftentimes interlocked, not by being under the control of the same directors, but by the fact that the greater part of their corporate stock is owned by a single person or group of persons who are in some way intimately related in interest. We are agreed, I take it, that holding companies should be prohibited, but what of the controlling private ownership of individuals or actually cooperative groups of individuals? Shall the private owners of capital stock be suffered to be themselves in effect holding companies? We do not wish, I suppose, to forbid the purchase of stocks by any person who pleases to buy them in such quantities as he can afford, or in any way arbitrarily to limit the sale of stocks to bona fide purchasers. Shall we require the owners of stock, when their voting power in several companies which ought to be independent of one another would constitute actual control, to make election in which of them they will exercise their right to vote? This question I venture for your consideration.

There is another matter in which imperative considerations of justice and fair play suggest thoughtful remedial action. Not only do many of the combinations effected or sought to be effected in the industrial world work an injustice upon the public in general; they also directly and seriously injure the individuals who are put out of business in one unfair way or another by the many dislodging and exterminating forces of combination. I hope that we shall agree in giving private individuals who claim to have been injured by these processes the right to found their suits for redress upon the facts and judgments proved and entered in suits by the Government where the Government has upon its own initiative sued the combinations complained of and won its suit, and that the statute of limitations shall be suffered to run against such litigants only from the date of the conclusion of the Government's action. It is not fair that the private litigant should be obliged to set up and establish again the facts which the Government has proved. He cannot afford, he has not the power, to make use of such processes of inquiry as the Government has command of. Thus shall individual justice be done while the processes of business are rectified and squared with the general conscience.

I have laid the case before you, no doubt as it lies in your own mind, as it lies in the thought of the country. What must every candid man say of the suggestions I have laid before you, of the plain obligations of which I have reminded you? That these are new things for which the country is not prepared? No; but that they are old things, now familiar, and must of course be undertaken if we are to square our laws with the thought and desire of the country. Until these things are done, conscientious businessmen the country over will be unsatisfied. They are in these things our mentors and colleagues. We are now about to write the additional articles of our constitution of peace, the peace that is honor and freedom and prosperity.

EXHIBIT No. 310

FEDERAL TRADE COMMISSION REPORTS ON CHAIN STORE STUDY
TRANSMITTED TO THE SENATE

SEVENTY-SECOND CONGRESS, FIRST SESSION

Title	Senate Document No.	New order No.
Cooperative Grocery Chains.....	12	6
Wholesale Business of Retail Chains.....	29	10
Sources of Chain-Store Merchandise.....	30	8
Scope of the Chain-Store Inquiry.....	31	-----
Chain-Store Leaders and Loss Leaders.....	51	14
Cooperative Drug and Hardware Chains.....	82	7
Growth and Development of Chain Stores.....	100	2

SEVENTY-SECOND CONGRESS, SECOND SESSION

Chain-Store Private Brands.....	142	16
Short Weighing and Over Weighing in Chain and Independent Grocery Stores.....	153	18
Sizes of Stores of Retail Chains.....	156	4
Quality of Canned Vegetables and Fruits (under Brands of Manufacturers, Chains, and other Distributors).....	170	17
Gross Profit and Average Sale per Store or Retail Chains.....	178	30

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Chain-Store Manufacturing.....	13	9
Sales, Costs, and Profits of Retail Chains.....	40	31
Prices and Margins of Chain and Independent Distributors, Washington, D. C., Grocery.....	62	19
Prices and Margins of Chain and Independent Distributors, Memphis—Grocery.....	69	21

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Prices and Margins of Chain and Independent Distributors, Detroit—Grocery.....	81	22
Chain-Store Wages.....	82	12
Chain-Store Advertising.....	84	15
Chain-Store Price Policies.....	85	13
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Invested Capital and Rates of Return of Retail Chains.....	87	32
Prices and Margins of Chains and Independent Distributors, Cincinnati—Grocery.....	88	20
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Final Report on the Chain Store Investigation.....	4	34
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"EXHIBIT No. 311", introduced on p. 1804, is on file with the Committee.

"EXHIBIT No. 312", introduced on p. 1804, is on file with the Committee.

"EXHIBIT No. 313", introduced on p. 1804, is on file with the Committee.

"EXHIBIT No. 314", introduced on p. 1804, is on file with the Committee.

"EXHIBIT No. 315", introduced on p. 1804, is on file with the Committee.

"EXHIBIT No. 316", introduced on p. 1828, is on file with the Committee.

"EXHIBIT No. 317", introduced on p. 1828, is on file with the Committee.

"EXHIBIT No. 318", introduced on p. 1828, is on file with the Committee.

"EXHIBIT No. 319", introduced on p. 1833, is on file with the Committee.

"EXHIBIT No. 320", introduced on p. 1833, is on file with the Committee.

"EXHIBIT No. 321", introduced on p. 1836, is on file with the Committee.

"EXHIBIT No. 322", introduced on p. 1836, is on file with the Committee.

"EXHIBIT No. 323", introduced on p. 1837, is on file with the Committee.

EXHIBIT No. 324

[Federal Trade Commission survey of utilities]

Sample of pyramiding in Associated Gas & Electric System March 31, 1932

Name of Company	State of Incorporation	Nature of Principal Business	Per Cent of Control
Associated Gas & Electric Properties.....	Mass. Trust.....	Holding Co.....	-----
Associated Securities Corporation.....	Delaware.....	do.....	100.0
Associated Gas & Electric Company.....	New York.....	do.....	100.0
Associated Gas & Electric Corporation ¹	Delaware.....	do.....	100.0
Rochester Central Power Corporation.....	Delaware.....	do.....	100.0
Rochester Central Power Corporation.....	New York.....	do.....	99.5
Mohawk Valley Company, The.....	New York.....	do.....	100.0
Mohawk Valley Company.....	Delaware.....	do.....	100.0
New York Electric Company.....	Delaware.....	do.....	100.0
New York State Electric & Gas Corporation.....	New York.....	Elec. & Gas.....	100.0
Patachogue Electric Light Company, The.....	New York.....	Electric.....	100.0

¹ Formerly Associated Utilities Investing Corporation.

"EXHIBIT No. 325" introduced on p. 1840, is on file with the Committee.

"EXHIBIT No. 326" introduced on p. 1840, is on file with the Committee.

"EXHIBIT No. 327" introduced on p. 1840, is on file with the Committee.

"EXHIBIT No. 328" introduced on p. 1843, is on file with the Committee.

EXHIBIT No. 329

[F. T. C. Table No. 1]

F. T. C. antitrust cases by type of commodity as classified by the 1935 biennial census of manufactures

Industries by groups	Number of cases	Number of establishments	Total salaried personnel	Total salaries (000)	Total wage earners	Total wages (000)	Value of products (000)
1. Food and kindred products.....	8	9,824	50,545	\$97,445	315,283	\$283,019	\$4,350,182
2. Textiles and their products.....	10	3,286	11,876	26,321	136,454	117,064	601,914
3. Forest products.....	4	9,412	24,763	46,459	326,902	240,558	814,309
4. Paper and allied products.....	4	1,761	13,523	32,763	82,692	77,027	494,434
5. Printing, publishing, and allied industries.....	7	40,730	315,969	633,638	505,460	751,187	3,856,744
6. Chemicals and allied products.....	14	1,624	22,440	54,035	106,452	117,258	1,116,860
7. Products of petroleum and coal...	1	180	1,228	2,684	1,933	2,282	36,069
8. Rubber products.....	3	454	14,714	31,975	97,435	117,601	624,497
9. Leather and its manufactures.....							
10. Stone, clay, and glass products...	4	2,511	13,146	28,067	120,120	113,880	440,089
11. Iron and steel and their products, not including machinery.....	10	2,367	55,515	125,773	527,946	614,148	2,827,311
12. Nonferrous metals and their products.....	5	785	9,398	19,174	59,789	63,832	751,520
13. Machinery, not including transportation equipment.....	8	5,015	107,213	221,987	426,030	499,234	2,237,154
14. Transportation equipment, air, land, and water.....	5	1,868	60,941	128,548	365,613	450,095	2,047,879
15. Railroad repair shops.....							
16. Miscellaneous industries.....	10	1,598	12,360	25,971	105,685	84,059	350,785
Grand total.....	93	81,415	713,631	1,474,540	3,177,794	3,531,244	20,549,687

EXHIBIT No. 330

[F. T. C. table No. 2]

F. T. C. antitrust cases from 1932 to date by type of commodity as classified by the 1935 biennial census of manufactures

Industry groups	Number of cases	Number of establishments	Total salaried personnel	Total salaries (000)	Total wage earners	Total wages (000)	Value of products (000)
1. Food and kindred products.....	4	4,189	16,887	\$33,938	161,702	\$109,938	\$1,098,971
2. Textiles and their products.....	8	2,797	8,463	19,281	61,402	72,145	379,690
3. Forest products.....	3	9,395	24,713	46,401	326,588	240,268	811,164
4. Paper and allied products.....	2	1,761	13,523	32,763	82,692	77,027	494,434
5. Printing, publishing, and allied industries.....	2	9,267	117,113	226,716	123,984	199,411	1,212,943
6. Chemicals and allied products.....	7	1,292	18,037	43,425	84,899	92,757	815,857
7. Products of petroleum and coal.....	3	454	14,714	31,975	97,435	117,601	624,497
8. Rubber products.....	3	1,437	8,433	18,669	75,537	79,277	328,892
9. Leather and its manufactures.....	3	1,437	8,433	18,669	75,537	79,277	328,892
10. Stone, clay, and glass products.....	7	1,291	14,613	30,750	99,762	103,274	636,566
11. Iron and steel and their products, not including machinery.....	3	588	6,525	13,725	39,961	43,084	645,670
12. Nonferrous metals and their products.....	3	1,801	56,582	118,703	229,888	262,152	1,182,259
13. Machinery, not including transportation equipment.....	3	1,868	60,941	128,548	365,613	450,095	2,047,879
14. Transportation equipment, air, land, and water.....	6	640	5,740	12,018	34,802	31,739	116,494
15. Railroad repair shops.....							
16. Miscellaneous industries.....							
Grand total.....	54	36,780	366,284	756,912	1,784,265	1,878,768	10,395,046

EXHIBIT No. 331

[F. T. C. Table No. 3]

F. T. C. antitrust cases from 1932 to date by type of commodity as classified by the 1935 census of business: Retail and wholesale distribution

Kind of business	Number of cases	Number of establishments	Net sales (000)	Active proprietors and firm members	Employees (full and part time)
Automotive.....	1	4,798	\$339,820	2,898	35,117
Drugs.....	1	274	297,784	36	13,984
Food.....	5	201,692	4,168,779	181,462	226,994
Furniture.....	1	17,701	745,935	15,393	80,914
Liquors.....	5	1,340	370,158	747	14,475
Lumber, building materials, etc.....	4	7,429	434,019	5,327	41,385
Machinery and equipment.....	3	324	46,696	107	3,501
Tobacco.....	1	1,914	744,644	1,551	14,081
Waste materials.....	1	1,569	122,946	1,362	11,274
Total.....	22	237,041	7,270,781	208,883	441,725

EXHIBIT No. 332

[F. T. C. table No. 4]

Unfair trade practices involved in F. T. C. anti-trust cases from 1932 to date by type of commodity as classified by the 1935 biennial census of manufactures

Unfair trade practices	Food and kindred products	Textiles and their products	Forest products	Paper and allied products	Printing, publishing, and allied industries	Chemicals and allied products	Rubber products	Stone, clay, and glass products	Iron and steel and their products (not including machinery)	Nonferrous metals and their products	Machinery, not including transportation equipment	Transportation equipment, air, land, and water	Miscellaneous industries	Total
1. Acquiring stock in competitor.....					1				1					2
2. Coercing and intimidating.....	1											2		3
3. Combining—														
To eliminate competition.....	1	1			1	1		1	1	1	1			8
To fix and maintain prices.....	1	4	3	2		3	1	1	3	2	2	1	3	26
To restrict distribution to recognized dealers.....		4	1				1	1	2					9
4. Dealing on exclusive basis.....	1				1				1			1	1	5
5. Discriminating in price.....	1	1	1			4	1	1					3	12
6. Maintaining resale prices.....		1												1
7. Operating bogus independent.....					1									1
8. Selling below cost to injure competitors.....					1									1
9. Threatening patent infringement suits not in good faith.....					1									1
Total unfair trade practices.....	5	11	5	2	6	8	3	4	8	3	3	4	7	69
Number of cases.....	4	8	3	2	2	7	3	3	7	3	3	3	6	54

EXHIBIT No. 333

[F. T. C. table No. 5]

Unfair trade practices in F. T. C. anti-trust cases from 1932 to date by type of commodity as classified by the 1935 census of business: Retail and wholesale distribution

Unfair trade practices	Automotive	Drugs	Food	Furniture	Liquors	Lumber	Machinery & equipment	Tobacco	Waste material	Total
Combining—										
To eliminate competition.....							1		1	2
To fix and maintain prices.....	1		3		5	2	2	1		14
To restrict distribution to recognized dealers.....			3	1		2	2	1		9
Discriminating in price.....		1	1							2
Total.....	1	1	7	1	5	5	5	2	1	28
No. of cases.....	1	1	5	1	5	4	3	1	1	22

EXHIBIT No. 334

[F. T. C. table No. 6]

TYPES OF UNFAIR METHODS OF COMPETITION CONDEMNED BY THE FEDERAL TRADE COMMISSION¹

The following partial list shows types of unfair methods of competition which have from time to time been condemned by the Commission.

(1) Misbranding of fabrics and other commodities respecting the materials or ingredients of which they are composed, their quality, origin, or source.

(2) Adulteration of commodities, misrepresenting them as pure, or selling them under such names and circumstances that the purchaser would be misled into believing them to be pure.

(3) Bribery of buyers or other employees of customers and prospective customers to secure new customers or induce continuation of patronage.

(4) Making unduly large contributions of money to associations of customers.

(5) Procuring the business of trade secrets of competitors by espionage, by bribing their employees, or by similar means.

(6) Procuring breach of competitor's contracts for the sale of products by misrepresentation or by other means.

(7) Inducing employees of competitors to violate their contracts or enticing away employees of competitors in such numbers or under such circumstances as to hamper or embarrass them in business.

(8) Making false or disparaging statements respecting competitors' products, their business, financial credit, etc.

(9) The use of false or misleading advertisements.

(10) Making vague and indefinite threats of patent-infringement suits against the trade generally, the threats being couched in such general language as not to convey a clear idea of the rights alleged to be infringed, but, nevertheless, causing uneasiness and fear in the trade.

(11) Widespread threats to the trade of suits for patent infringement arising from the sale of alleged infringing products of competitors, such threats not being made in good faith but for the purpose of intimidating the trade.

(12) False claims to patent, trade-mark, or other rights or misrepresenting the scope thereof; appropriating and using trade-marks wrongfully.

(13) Intimidation for the purpose of accomplishing enforced dealing by falsely charging disloyalty to the Government.

(14) Tampering with and misadjusting the machines sold by competitors for the purpose of discrediting them with purchaser.

(15) Trade boycotts or combinations of traders to prevent certain wholesale or retail dealers or certain classes of such dealers from procuring goods or goods at the same terms accorded to the boycotters or conspirators, or to coerce the trade policy of their competitors or of manufacturers from whom they buy.

(16) Passing off of products, facilities, or business of one manufacturer or dealer for those of another by imitation of product, dress of goods, or by simulation or appropriation of advertising or of corporate or trade names, or of places of business, and passing off by a manufacturer of an inferior product for a superior product theretofore made, advertised, and sold by him.

(17) Unauthorized appropriation of the results of a competitor's ingenuity, labor, and expense, thereby avoiding costs otherwise necessarily involved in production.

(18) Preventing competitors from procuring advertising space in newspapers or periodicals by misrepresenting their standing or other misrepresentation calculated to prejudice advertising mediums against them.

(19) Misrepresentation in the sale of stock of corporations.

(20) Selling rebuilt machines of various descriptions, rebuilt automobile tires, and old motion-picture films slightly changed and renamed as and for new products.

(21) Harassing competitors by requests, not in good faith, for estimates on bills of goods, for catalogues, etc.

(22) Giving away of goods in large quantities to hamper and embarrass small competitors and selling goods at cost to accomplish the same purpose.

(23) Sales of goods at cost, coupled with statements misleading the public into the belief that they are sold at a profit.

(24) Bidding up the prices of raw materials to a point where the business is unprofitable for the purpose of driving out financially weaker competitors.

¹ Taken from annual reports of the Federal Trade Commission.

(25) The use by monopolistic concerns of concealed subsidiaries for carrying on their business, such concerns being held out as not connected with the controlling company.

(26) Intentional appropriation or converting to one's own use of raw materials of competitors by diverting shipments.

(27) Giving and offering to give premiums of unequal value, the particular premiums received to be determined by lot or chance, thus in effect setting up a lottery.

(28) Schemes and devices for compelling wholesalers and retailers to maintain resale prices on products fixed by the manufacturer.

(29) Combinations of competitors to enhance prices, maintain prices, bring about substantial uniformity in prices, or to divide territory or business, or to put a competitor out of business, or to close a market to competitors.

(30) Acquiring stock of another corporation or corporations where the effect may be to substantially lessen competition, restrain commerce, or tend to create a monopoly.

(31) Various schemes to create the impression in the mind of the prospective customer that he is being offered an opportunity to make a purchase under unusually favorable conditions when such is not the case, such as—

(a) Sales plans in which the seller's usual price is falsely represented as a special reduced price made available on some pretext for a limited time or to a limited class only.

(b) The use of the "free" goods or service device to create the false impression that something is actually being thrown in without charge, when, as a matter of fact, fully covered by the amount exacted in the transaction taken as a whole.

(c) Sales of goods in combination lots only with abnormally low figures assigned to staples, the prices of which are well known and correspondingly highly compensating prices assigned to staples, the cost of which is not well known.

(d) Sale of ordinary commercial merchandise at usual prices and profits as pretended Government war surplus offered at a bargain.

(e) Use of misleading trade names calculated to create the impression that a dealer is a manufacturer selling directly to the consumer with corresponding savings.

(f) Plans ostensibly based on chance or services to be rendered by the prospective customer whereby he may be able to secure goods contracted for at particularly low prices or without completing all the payments undertaken by him, when, as a matter of fact, such plans are not carried out as represented and are a mere lure to secure his business.

(g) Use of pretended exaggerated retail prices in connection with or upon the containers of commodities intended to be sold as bargains at lower figures.

(h) Falsely claiming forced sale of stock, with resulting forced price concessions, when, as a matter of fact, inferior goods are mingled with the customary stock.

(32) Seeking to cut off and hamper competitors in marketing their products through destroying or removing their sales display and advertising mediums.

(33) Discriminating in price, with the effect of substantially lessening competition.

(34) Subsidizing public officials or employees through employing them or their relatives under such circumstances as to enlist their interests in situations in which they will be called upon by virtue of their official position to act officially, making unauthorized changes in proposed municipal bond issues, corrupting public officials or employees and forging their signatures, and using numerous other grossly fraudulent, coercive, and oppressive practices in dealing with small municipalities.

(35) Suggesting to prospective customers the use of specific, unfair, and dishonorable practices directed at competitors of the seller.

(36) Imitating or using standard containers customarily associated in the mind of the general purchasing public with standard weights of the product therein contained, to sell to said public such commodity in weights less than the aforementioned standard weights.

(37) Concealing business identity in connection with the marketing of one's product, or misrepresenting the seller's relation to others, e. g., claiming falsely to be the agent or employee of some other concern, or failing to disclose the termination of such a relationship in soliciting customers of such concern, etc.

(38) Misrepresenting in various ways the advantages to the prospective customer of dealing with the seller, such as—

(a) Seller's alleged advantages of location or size.

(b) False claims of being the authorized distributor of some concern.

- (c) Alleged indorsement of the concern or product by the Government or by nationally known businesses.
- (d) False claim by a dealer in domestic products of being an importer, or by a dealer of being a manufacturer, or by a manufacturer of some product, or being also the manufacturer of the raw material entering into said product.
- (e) False claim of "no extra charge for credit."
- (f) Being manufacturer's representative and outlet for surplus stock sold at a sacrifice, etc.
- (39) Tying or exclusive contracts, leases, or dealings in which, in consideration of the granting of certain rebates or refunds to the customer, or the right to use certain patented equipment, etc., the customer binds himself to deal only in the products of the seller or lessor.
- (40) Showing and selling prospective customers articles not conforming to those advertised, in response to inquiries, without so stating.
- (41) Direct misrepresentation of the composition, nature, or qualities of the product offered and sold.
- (42) Use by business concerns associated as trade organizations or otherwise of methods which result or are calculated to result in the observance of uniform prices or practices for the products dealt in by them with consequent restraint or elimination of competition, such as use of various kinds of so-called standard cost systems, price lists, or guides, exchange of trade information, etc.
- (43) Securing business through undertakings not carried out and through dishonest and oppressive devices calculated to entrap and coerce the customer or prospective customer, such as:
 - (a) Securing prospective customers' signature by deceit to a contract and promissory note represented as simply an order on approval, securing agents to distribute the seller's products through promising to refund the money paid by them should the product prove unsatisfactory, and through other undertakings not carried out.
 - (b) Securing business by advertising a "free trial" offer proposition, when, as a matter of fact, only a "money back" opportunity is offered the prospective customer, etc.
- (44) Giving products misleading names so as to give them a value to the purchasing public or to a part thereof which they would not otherwise possess, such as—
 - (a) Names implying falsely that the particular products so named were made for the Government or in accordance with its specifications and of corresponding quality, or are connected with it in some way, or in some way have been passed upon, inspected, underwritten, or indorsed by it.
 - (b) That they are composed in whole or in part of ingredients or materials respectively contained only to a limited extent or not at all.
 - (c) That they were made in or came from some locality famous for the quality of such products.
 - (d) That they were made by some well and favorably known process, when, as a matter of fact, only made in imitation of and by a substitute for such process.
 - (e) That they have been inspected, passed, or approved after meeting the tests of some official organization charged with the duty of making such tests expertly and disinterestedly or giving such approval.
 - (f) That they were made under conditions or circumstances considered of importance by a substantial fraction of the general purchasing public, etc.
- (45) Interfering with established methods of securing supplies in different businesses in order to hamper or obstruct competitors in securing their supplies.

EXHIBIT No. 336

F. T. C. Table No. 11

PROGRAM OF STUDIES

- | | |
|---------------------------|----------------------|
| 1. Steel | 7. Poultry |
| 2. Farm Machinery | 8. Fish |
| 3. Rubber Tires and Tubes | 9. Liquor |
| 4. Sulphur | 10. Tobacco |
| 5. Milk | 11. Glass Containers |
| 6. Cheese | 12. Artichokes |

EXHIBIT No. 337

[F. T. C. Table No. 7]

Estimated scope of studies presented in Temporary National Economic Committee hearings under auspices of Federal Trade Commission

Industry	No. Enter-prises	No. Em-ployees	Total salaries and wages	Value of products
			000 omitted	
Steel.....	410	519,838	\$888,900	\$3,330,500
Farm Machinery.....	262	89,726	146,200	564,800
Rubber Tires, Tubes.....	46	74,242	122,000	575,900
Sulphur.....				44,300
Liquor (distilled spirits).....	151	7,503	10,300	113,100
Dairy products ¹	9,814	66,327	80,000	1,195,300
Tobacco.....	125	11,286	11,300	134,600
Fish.....	325	19,242	11,000	78,400
Poultry.....	533	10,149	7,900	105,900
Totals (incomplete).....	11,666	798,313	1,277,600	6,142,800

¹ Includes condensed and evaporated milk. In addition, 79,370,000,000 pounds of milk were produced on the farm in 1936, the gross farm income from which was estimated as \$1,870,158,000.

1937 estimates from official sources.

"EXHIBIT No. 338", introduced on p. 1864, is on file with the Committee.

"EXHIBIT No. 339", introduced on p. 1864, is on file with the Committee.

"EXHIBIT No. 340", introduced on p. 1864, is on file with the Committee.

"EXHIBIT No. 341", introduced on p. 1864, is on file with the Committee.

"EXHIBIT No. 342", introduced on p. 1864, is on file with the Committee.

"EXHIBIT No. 343", introduced on p. 1864, is on file with the Committee.

"EXHIBIT No. 344", introduced on p. 1864, is on file with the Committee.

"EXHIBIT No. 345", introduced on p. 1895, is on file with the Committee.

"EXHIBIT No. 346", introduced on p. 1895, is on file with the Committee.

"EXHIBIT No. 347", introduced on p. 1895, is on file with the Committee.

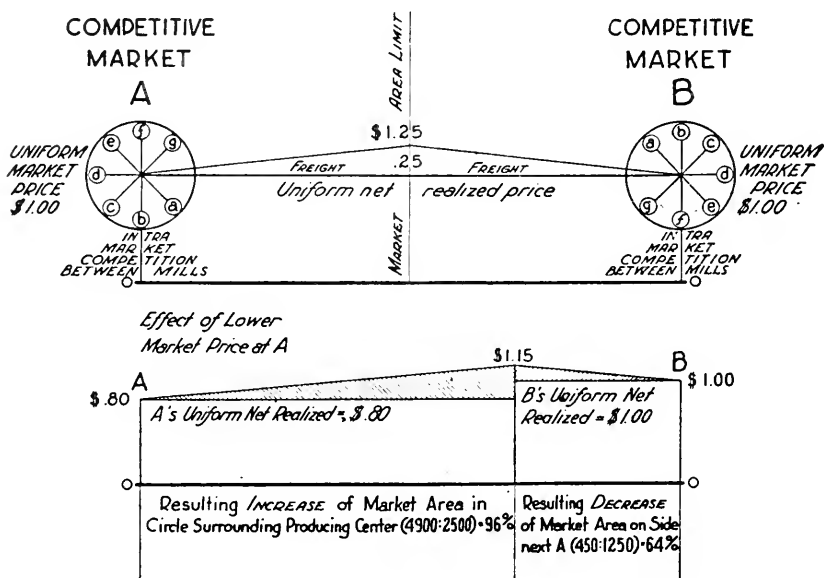
"EXHIBIT No. 348", introduced on p. 1896, is on file with the Committee.

"EXHIBIT No. 349", introduced on p. 1896, is on file with the Committee.

"EXHIBIT No. 350", introduced on p. 1903, is on file with the Committee.

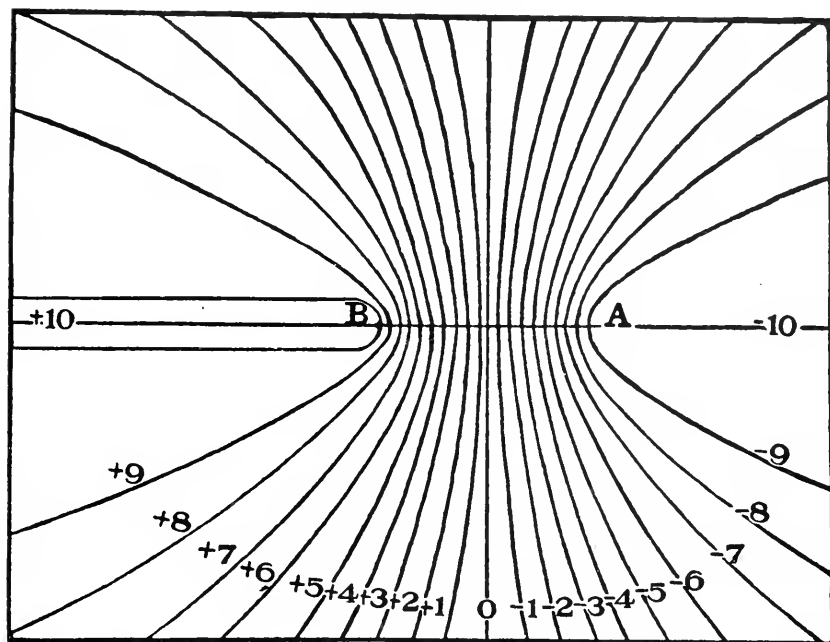
EXHIBIT No. 351

Chart A.— INTERMARKET COMPETITION WITH UNIFORM MARKET PRICES.



[Prepared under direction of Prof. Fetter]

EXHIBIT No. 352

MARKET AREAS DETERMINED BY COMPETITIVE PRICE
DIFFERENTIALS

[Prepared under direction of Prof. Fetter]

EXHIBIT No. 354

[Prepared under direction of Prof. Fetter]

Chart A.-(Supplemental)

INTERMARKET COMPETITION WITH UNIFORM MARKET PRICES.

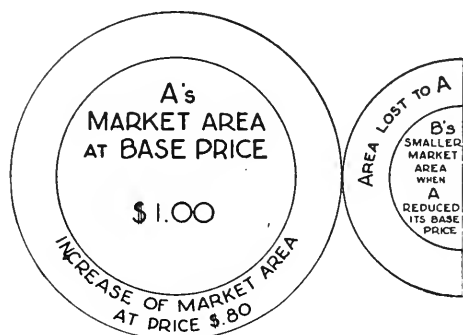


EXHIBIT No. 355

[Prepared under direction of Prof. Fetter]

Chart B. - MONOPOLISTIC, VERSUS COMPETITIVE PRODUCERS RESULTS OF DISCRIMINATORY PRICES.

PRODUCERS AT A
COMPLETELY
MERGED
NON-BASING POINT

B STILL A
COMPETITIVE
MARKET
BASING POINT

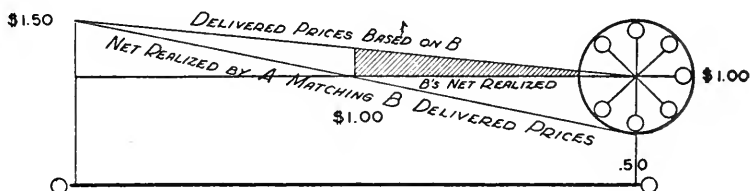
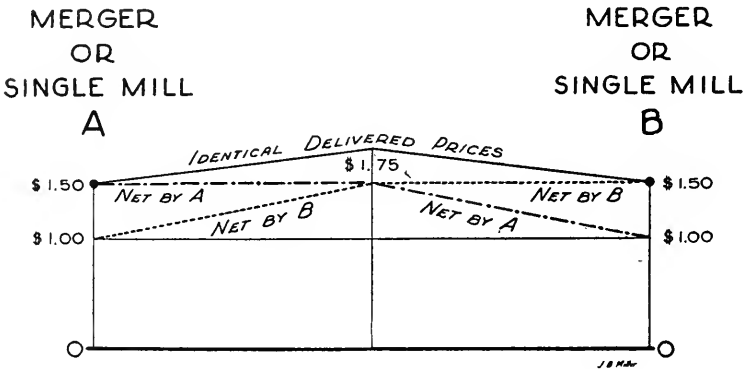


EXHIBIT No. 353

[Prepared under direction of Prof. Fetter]

Chart C. -

IDENTICAL (MATCHED) DELIVERED PRICES
BETWEEN TWO BASING POINTS



Steel mills and dumping from Cleveland, Youngstown, Pittsburgh, Johnstown, Lackawanna, Baltimore, Coatesville, Wilmington, and Bethlehem (initiated) and other mills. Smaller circles locate nonproducing destinations.

[Federal Trade Commission Docket 962, Witness, Hugh E. White]



EXHIBIT No. 358

[Federal Trade Commission]

MONOPOLY AND COMPETITION IN STEEL

The following outline describes the price relationships which the Commission has reason to believe exist in the steel industry. The statements are based on investigations of the industry made by the Commission at various times. They are presented for the preliminary consideration of the Temporary National Economic Committee, and will be further developed as the Committee's investigation proceeds. Although some changes in method were introduced in June 1938, the fundamentals of the steel pricing system were not affected.

Briefly, the basing point system in steel operates as follow: For each particular steel product a number of points have been selected at which "base prices" are quoted. The delivered price at any other point is computed by adding to the base price at each basing point the railway freight charge from that point to point of delivery and adopting the smallest of these totals. The steel may actually be shipped from a great distance or from next door to the customer's plant, but the delivered price is the same in all cases, that is, the customer pays as if the steel were always shipped from the "governing" basing point, i. e., that giving the lowest delivered cost according to the formula.

This is the skeleton outline of the system. In practice it is complicated by the existence of different basing points, for different steel products, and by a system of "extras," identical for all companies, representing special quality, size, shape, or quantity. In effect, however, the formula enables all steel producers, without the necessity of special consultation, to arrive at an identical delivered price for any order of steel delivered at any point in the United States. With occasional lapses, the system works, and the buyer normally receives identical quotations from all bidders.

The original basing point system in the industry was the so-called Pittsburgh Plus, under which steel was sold at a delivered price equal to the Pittsburgh price plus freight from Pittsburgh. Other basing points have since been established, and the present is a multiple system.

This report deals with the basing-point system as the method for establishing the identical delivered prices found in the steel industry. It should be made clear that the objective of this examination is not to find some other mechanism for producing the same effect, but to consider the effects of identical delivered prices, whether derived from the use of a basing-point formula, or by any other method.

VISIBLE EFFECTS OF IDENTICAL DELIVERED PRICES

When the basing-point system is operating smoothly, it appears that quotations on steel of a given quality and quantity are identical at any given point of delivery. The formula, covering base price and rail freight from the governing basing point, is known to all members of the industry. Mills located at points other than the basing point use the standard formula as if they were located there.

To the customer, at his location, there is no difference between the quality and delivered price offered by all the bidders. Occasional variations from this perfect identity are observed, but only during short periods when there was a temporary flurry of price cutting. Such flurries have been an incident of practically all price-fixing systems. They occurred even in the days of signed price agreements in the steel industry.

On the surface, the producers approach the consumer with a united front. Competition in such crude matters as price and quality has been put aside, and all that seems to remain is a gentlemanly emulation in the art of making friends and influencing people.

Secret discounts or concessions in quantity or quality may continue to exercise an influence of a more material character in the case of strong and influential private purchasers. Small and medium-sized private buyers pay the formula price. Public bodies, not being permitted to accept secret favors, have no legal reason for choice, there being no lowest bidder, and are reduced to making awards by lot.

The available evidence indicates that secret violation of the identical delivered price system is seldom of such importance as to prevent the general economic effects of controlled prices.

Since the delivered price quoted is the same among bidders with many different freight costs, the net amount received or mill realization varies among the bidders, depending on their distance from the point of delivery.

A plant not located at a basing point will charge even to customers located at its own door the base price plus freight from the governing basing point. But in selling to a customer located at the basing point it will quote only the base price, and will deduct the actual freight from its plant to the customer at that basing point, leaving as a net return the base price minus freight.

A plant located at a basing point will sell its product at all points within the area where the delivered price is governed by that basing point, at the same base price, plus the actual rail freight to point of delivery. When bidding outside this area, however, it must "absorb" a part of the freight, which means accepting a lower net price in order to match the delivered price which is computed by the standard formula from some other basing point. That is, outside the area governed by its own basing point, the basing-point mill will accept varying net prices in the same way as a mill not located at a basing point.

Thus the immediate effect of this artificial price system is to distort the area of distribution of each mill, in such a way that its net return per ton of steel from different customers is generally different.

The customer who is nearest the place of production does not necessarily receive the lowest delivered price for steel.

If the nearby place of production is not a basing point, the customer located there must nevertheless pay the equivalent of rail freight from the governing basing point.

Studies of actual sales of steel show that mills deliver steel in the neighborhood of other mills that are producing steel of the same kind, and these in turn ship their product to the neighborhood of their rivals, or even beyond. Physically this cross-hauling is a pure waste; it could be justified only if some other form of economy were to be obtained by means of an interchange of identical products.

Between two interconnected power systems, for example, power may flow in one direction at one time and back at another, because of differences in the timing of peak loads. But no such excuse can be found for cross-hauling in steel. Occasionally an abnormal demand for steel may appear first in one place and then in another, so as to overload the nearest producing plants and require importation from others. The constant cross-hauling of steel, however, is a different matter. It is a continual and simultaneous process. It unquestionably shows that mills do not ordinarily supply the nearest customers before looking to more distant ones. The cost of the wasted freight must be borne in the first instance by the injured communities and in the last analysis by the general public in one form or another. The cost is actually covered by maintaining base prices so high that a producer can ship steel for long distances past another producing mill and still find the business worth taking.

Finally, the evidence at hand shows what is inherent in the pricing plan, that a customer not located at a basing point but located near a steel mill is deprived of the benefit of the low haulage cost from the nearest mill to his door. The neighboring mill will, to be sure, offer him a bid, but no better than he can get from mills farther away. Under this pricing system he would be as cheaply supplied if the nearby mill did not exist.

To call the relation of a mill to its nearest customers a "local monopoly" is to confuse the issue. The correct term is "advantage of location"; it represents a natural physical fact: low cost of transportation. This is no more properly called monopoly than would be the possession of a low-cost plant or an unusually efficient personnel. Since the avowed purpose of competition is to allow the consumers the use of the lowest cost methods, any economy in the physical factors of production, including economy of transportation, is a legitimate competitive factor.

Moreover, a customer so located that steel can be shipped to him by barge or by truck, at less than railway freight costs, is not usually allowed the benefit of this advantage. The mill may ship by water, or by truck, but with relatively few exceptions the quoted price is based on rail freight. It would seem that the reason for using rail freights in all cases is that only by so doing can identical delivered quotations be conveniently assured.

The system appears to be designed not as a means of computing actual delivered costs, but of assuring the absence of price competition at any point of delivery. This situation must involve a general and continuous waste, since it would obviously be more efficient if customers were able to buy at a lower cost from the nearest available source. It is a system that makes a profit for the producer by wasting the customer's money.

IMPLICATIONS OF IDENTICAL DELIVERED PRICES

It is reasonable to assume that the industry succeeds or expects to succeed in making the customer pay for the wastes of cross-hauling, and enough more to furnish a motive for the self-discipline involved in an identical delivered price system. The base prices established must be intended to produce a profit on the business as a whole, even though as an incident they may require a company to accept a comparatively low net return on some particular sale.

Experience indicates, in fact, that when the system temporarily breaks down, prices fall.

The pricing system in steel is often called an "umbrella," the implication being that it holds up a price level under which mills of all degrees of efficiency or obsolescence find shelter. There appears to be a tendency for obsolete mills to survive after new and more efficient plants have entered the field, resulting in excess capacity and a low average percentage of operation. As will be noted later, the value of an old plant would be more easily defended if it actually served a neighboring market at a net saving to the customers.

Overequipment in the industry, with failure to eliminate the least efficient plants, tends to discourage technological progress, but its chief effect appears to have been to accustom the industry to the idea of a low ratio of production to capacity. The industry has felt entitled to a price level that will allow it to make a profit when operating at less than 40 percent of capacity, although this required percentage increased with the base price reductions of June 1938.

But since the capital costs are a large factor in steel making, in effect the public is required to pay, on a given tonnage of steel, the capital charges on a larger plant investment than is needed to produce that tonnage. The price flurry of June 1938, reduced base prices; the industry was forced to operate at better than 50 percent of capacity to make a profit. This change was regarded by the industry as deplorable, though it led to large increases in production and consequently in employment. "The situation was competitive," Mr. Grace said, and he hoped that it had been cured."¹

If the concept of price adopted in Pittsburgh Plus case in 1924 is sound under the present law, the basing point practice may be regarded as one of systematic price discrimination designed to serve the interests of the sellers, as a group, against the interests of such buyers as desire price competition, and of consumers in general. Such systematic discrimination should be distinguished from a different type—the sporadic, unorganized price discrimination found in an unprotected competitive market where unfair practices are permitted.

Discrimination in the absence of an identical delivered price system takes the sporadic form of charging profitable prices in nearby territory and accepting a lower net return on sales to customers who are in a position to buy from a rival's territory. This may easily become price raiding, a use of financial power to overwhelm a financially weaker competitor. By raiding one small competitor after another, a powerful company can acquire numerous plants and destroy competition over a large area, becoming a monopoly of the old fashioned type in which control over prices is obtained by ownership of the bulk of the business. This undesirable situation can be expected to occur if competition without protection against price raiding should be reestablished in industries now under monopoly control.

The custom of charging an extra price for small quantities of steel over the price for large quantities requires the small buyer to pay more for his material, but is not necessarily discriminatory in the sense used in this discussion, since there may be a difference in cost for producing and handling small items. If, however, the difference charged is excessive, it becomes a form of discrimination.

The fact that discrimination in an unprotected market may lead to monopoly is the origin of the opinion, often sincerely held by business men, that any kind of competition must inevitably destroy itself, and that only by controlled prices can individual businesses be actually preserved. The Commission regards this line of reasoning as fallacious and disastrous.

The truth should be recognized, that a free market must be protected to prevent price discrimination, or it is likely to permit the survival of the financially strongest rather than of the most efficient. But to sanction private price controls such as those in the steel industry as a protection against price raiding is to establish monopoly by agreement for the sake of avoiding monopoly by capture.

The identical delivered price system in steel preserves the shadow of competition by giving up the substance.

¹ New York Times, October 28, 1938.

The courts have long since declared it unlawful for a great combination to cut prices in one territory in order to destroy a local competitor, meanwhile making up the deficiency by the profits of other sections. A similar principle should be applicable in a vertically integrated company.

The Federal Trade Commission found in the Pittsburgh Plus Case that the American Bridge Company could underbid its competitors because of being able to buy materials from fellow subsidiaries of the U. S. Steel Corporation, at lower prices than other fabricators could obtain them. Since this finding was entered, several other large steel producers have acquired fabricating companies, and thus have opportunities for a similar advantage over independent fabricators.

If such camouflaged discrimination is to be prevented, it would be necessary to insist that separate accounts be kept for all parts of a vertically integrated company as if they were independent concerns, and that these accounts be subject to visitation by representatives of the government.

INDICATORS OF MONOPOLY

In a heavy staple industry, such as steel, there are certain indicators that may be taken as manifesting the existence or absence of monopoly.

If the demand for steel in a certain district is larger than the neighboring mills can supply, those mills should be running at capacity, unless their costs are higher than the cost of outside mills by more than the freight. If mills are running part time, while steel is being shipped in, monopoly is indicated.

If the supply of steel in a district is larger than the local demand can absorb, there should be no steel coming in, but the local consumers should be fully supplied locally. If steel is being shipped in, and if the fact is not explainable by cost differentials, monopoly is indicated.

Cross-hauling of identical products is a general symptom of failure of competition.

If identical or close bids on delivered steel are received from mills at different distances from the buyer, there is a presumption of monopoly, unless the facts can be explained by differences in cost of production. The only locations at which the receipt of closely similar bids, from diversely situated mills, can be disregarded as indicators are on the borderlines between producing areas.

EFFECTS OF IDENTICAL DELIVERED PRICES

To summarize the effects which we have reason to believe follow from the system of identical delivered prices: The wastes of cross-hauling and of excess capacity and high capital overhead are saddled on the consumer as if they were legitimate costs. Under the guise of freight costs, buyers located at a distance from a basing point even though they purchase from a mill in their own city are charged what amounts to a penalty.

Thus the advantage or disadvantage of location for many buyers is an artificial one, which may be altered by arbitrary private decree through a change in the basing point. Price competition in the steel industry, during all periods when the system is working, is eliminated. High prices, not in conformity with the law of supply and demand, place unreasonable limitations on use of the material. The effect, when combined with that of similar artificial prices in many other lines of production, is a depressed condition which can be kept from utter collapse only by repeated doses of public subsidy.

EFFECTS OF PARTIAL COMPETITION

The fixed-price system in steel sometimes slips momentarily, as it did in June 1938. When the momentary "competition" is oured and peace once more hovers over the industry, competitive practices still crawl here and there under the surface. But such vestigial remnants of competition are not enough to restore a healthy condition.

The industry is adjusted to a condition of monopoly. Its plants are located at points dictated by monopoly practices—many of them are relics of the "Pittsburgh Plus," under which one principal basing point dominated the price structure.

A temporary restoration of competition is peculiarly painful to the industry because it cannot quickly adapt itself to an unprotected existence. Some of the independents, and some units of the larger companies, born and brought up under the "umbrella", fear to attempt a life of free competition. The desire to restore and maintain a monopolistic scale of prices is therefore a powerful influence in the industry. Moreover, such competition as does occur from time to time

in the industry takes the form of sporadic discriminatory price cutting, in which the more powerful companies may use their power to discipline the weaker independents.

The Commission agrees with the industry that unfair forms of competition should not be substituted in place of monopoly. The Commission is opposed to both.

It is recognized that the industry will naturally fear the adjustments necessary for the establishment of healthy competition. The Commission notes in the published hearings of the Subcommittee of the Senate Committee on the Judiciary on S. 10 and S. 3072, March 10, 1936, the following statement in a letter from the late Mr. John Treanor of the Riverside Cement Corporation to Mr. B. H. Rader of the Cement Institute. Although speaking of the cement industry, Mr. Treanor expresses a fear of competition that is common to other industries as well. He says:

"Do you think any of the arguments for the basing-point system which we have thus far advanced, will arouse anything but derision in and out of the Government? They amount to this—that we price this way in order to discourage monopolistic practices and to preserve free competition, etc. This is sheer bunk and hypocrisy. The truth is, of course—that ours is an industry above all others that cannot stand free competition and that must systematically restrain competition or be ruined. We sell in a buyers' market all the time."¹

In steel, as the Commission has observed, the normal and wholesome elimination of obsolete plants has not taken place. The industry has become addicted to monopoly as to a habit-forming drug. Its members fear nameless horrors if the drug should be withdrawn. Despite these fears, it remains true that a cure is necessary if the steel industry, together with American business in general, is to be restored to health.

MONOPOLY LEADS TO GOVERNMENT CONTROL

To some extent the steel industry has eliminated obsolete plants, following the process of merger, the choice of plants to be closed being made arbitrarily by those in control of the merger. The Commission calls attention to the fact that here, on a private scale, we see the substitution of arbitrary decision for the impersonal decisions of the free market in an important industry. But the philosophy of the competitive theory which underlies capitalism is that natural death in industry, under the forces of fair competition, is more merciful than death by fiat, and also more clearly in accord with the public interest. It is fair and reasonable that the best man should win, and that the loser should be obliged to hunt for some other source of income. But it is offensive to peace and good morals that a man should be driven out of business by financial power, whether his throat is cut in a sudden attack or whether he is captured first and killed later.

The experience of business in certain countries shows that if the natural elimination of the less efficient by competition is prevented, and elimination by private fiat is substituted, fiat will finally become the function of government. When the elimination of any members of an industry becomes the function of government, practices and injustices of an alarming kind have been observed.

The Commission points out that the drift toward monopoly involves the disquieting prospect that decisions, once the product of an impersonal economic necessity, may become the function of private or public dictators under conditions that offer the victims no avenue of escape.

The ability to decide on a price and hold to it regardless of demand, which is the essence of monopoly, is a prime factor in establishing the vicious circle of high prices, restricted production, and reduced employment so widely condemned as "scarcity economics." Starting with a price level designed to protect obsolete and unnecessary plants, and therefore having long periods of part-time operation and high overhead, the steel industry has established a habit of low production and high cost that seems to justify high prices. The demand is thereby restricted, and the vicious circle is completed by the continuance of high costs based on restricted output.

Moreover, in a product like steel which serves as raw material for other products, and for the machines with which other products are made, any unnecessary cost will be multiplied from step to step throughout industry so far as the influence of steel extends. The consumer is burdened with monopoly costs of steel multiplied several fold.

¹ U. S. Senate Comm. on the Judiciary. Hearings of Subcommittee on S. 10, S. 3072, Mar. 10, 1936, p. 537.

Unless and until this vicious circle of scarcity and unemployment can be broken, it is clear that it will act to grip the business world in paralysis. The practices of the steel industry alone may not ruin the capitalist system, but if they are reinforced by monopolistic practices in other industries, the total effect may come to be a strangulation of the blood stream of trade. Monopoly, like counterfeiting, is a profitable business for the first comer, but is subject to diminishing returns when it is more widely practiced.

There appears to be only one way in which the circle of high prices low production, and unemployment can be broken. That is through the restoration of price competition in accord with the ancient rule of capitalism, that at a low rate of production an industry ought to be losing money. The alternative is the abandonment of capitalism and experimentation with authoritarian controls.

Capitalist theory has always held that industry was expected to produce in the hope of profit, not that it was expected to stand idle at a profit. If the rewards of full-time industrial production are to be given equally for half-time work it is inevitable that labor and agriculture must also be supported on a half-time basis.

The Commission is not impressed with the argument that as steel output falls off and costs rise, it is necessary or desirable to maintain prices in an effort to break even. Such an argument violates the fundamental principles of capitalism. On the contrary, it is necessary and desirable to reduce prices in a falling market in an effort to increase tonnage and cut costs.

If free competition is not restored, the alternative will be public control of the details of business policy, including prices, wages, and production schedules. If private monopoly is permitted to spread through the greater part of the business system, public control appears to be unavoidable.

The Commission calls attention to the sequence of events in countries where the cartel form of monopoly has been encouraged. Centralization of power is the forerunner of a state, in which business, both small and large, is entirely subject to the direction of the government.

To the Commission the lesson seems clear that democratic liberty requires, as one of its foundation stones, the preservation and protection of a sufficient area of free capitalism to balance the necessary centralization of public utilities and other natural monopolies.

Freedom depends on preserving a wide field of opportunity for free initiative. Universal price controls constitute a repudiation of economic freedom and a demand for some form of authoritarian government.

COMPETITION

It is suggested that the relationship of competition, discrimination, and monopoly requires more definite clarification and legal definition in the public interest. Business in this country has passed through two stages on the way to the establishment of law and order. The first, or pioneer, stage was one of unrestrained discriminatory competition, in which financial power and influence were often used as weapons to destroy competitors. By a natural process of evolution, businessmen in certain industries organized private agreements for preventing competition of a kind unprofitable to themselves.

These private organizations for bringing order into business have not eliminated discrimination but have organized it in their own interest. Organized price controls have turned out to be monopolistic and oppressive to the consumer, and a source of depression and paralysis to trade. It is necessary now to pass on into a stage of established law, in which the required protection against discrimination is given by law to competitors and consumers alike.

Without an effective guarantee of protection against unfair and discriminatory attack, businessmen can hardly be expected to relinquish voluntarily their efforts to maintain private monopolistic systems for mutual self-protection.

As a basis for a sound policy of fair competition as distinguished from monopoly, it is believed to be essential to recognize the fundamental objectives of the free market as applied to steel. The free market is expected to give to the consumer the benefit of the lowest cost of production, and to reward the producer who eliminates waste. The market is expected to reward not only efficient production within the plant, but also efficiency in choice of location which minimizes transportation costs.

It is recognized that a market, unless policed to prevent discriminatory prices and other unfair methods, may fail to distinguish between efficiency and the advantages of financial power, and may give the rewards to power rather than to efficiency, as illustrated by the effects of unfair competition. Free markets,

therefore, must be policed to prevent interference by dominant force whether financial or physical.

The market, finally, is supposed to provide a competitive mechanism that will automatically eliminate obsolete capital, either by forcing obsolete steel companies out of business or by forcing them to scale down their liabilities. Definitions of economic terms must be drawn not from tradition, or from the "custom of the trade" as shaped by immediate private advantage, but from experience with the effects of such practices on the proper functioning of the market.

The Commission believes that a condition of sound competition in the steel industry would be fair to the consumer, efficient as an item in national production, and as nearly as possible free of brutality or cutthroat activities.

Sound competition would be fair to the consumer because it would permit him to have any advantage of buying from the nearest mill, at a minimum cost for freight. It would be fair because the prices he must pay would be under constant competitive pressure, since his local mill could not arbitrarily raise its price without giving up its borderline customers to a rival.

Sound competition would be efficient for the Nation because it would reduce wasteful cross hauling, the cost of which the Nation must bear. It would promote decentralized location of mills, tending to favor the growth of numerous scattered mills close to customers, or in the shortest line between customer and raw material, an important item in terms of economic stability and of national defense.

Sound competition would be largely free of the abuses that have tended to give competition a bad name and have unfortunately driven many businessmen to seek shelter in monopolistic agreements. While the effect of sound competition would be to give rewards to efficiency and proper location combined, it would act upon the less efficient rather by slow pressure than by sudden violence—impersonally rather than by the exercise of personal and arbitrary power.

It appears evident that a condition of sound competition would be favorable to the restoration of free initiative in the steel industry. Initiative may be considered as embodied in two forms, the establishment of new mills in favorable locations, and an active attempt of existing mills to get business by reducing costs to the consumer. Both forms are stifled in the steel industry by the basing point system.

The protection of obsolete plants under the umbrella, by retaining excess capacity in the industry, impairs the incentive to build new and more efficient plants or to secure a better location.

Free initiative in the sense of trying to get business by offering advantages to the consumer is not only restricted under the basing point system, but is regarded as an offense, subject to the danger of retaliation by the industry.

If a mill merely follows the price leaders in a generally observed price system, it has relaxed from competition, and is trusting to some more subtle influence to provide its share of the business. Initiative means leading the price in its own area, and leading it down to the level at which the area of the local mill is effectively protected by freight costs against the loss of its profitable business. Initiative in the form of local self-determination is seldom, if ever, found today in the steel industry.

Local initiative is frowned upon by the leaders of the industry. In 1930, a steel industry leader deplored that "several months ago price instability was permitted to come into our commercial relations." Another high steel executive, saying that price cutting kills business, added: "We have got to be honest." The potential punishment for any serious attempt to violate the basing point price system is price raiding, that soon brings the rebels to terms. It is vital to an understanding of this situation to make clear the ethics on which it is based.

Unethical conduct in selling steel includes those underhand devices by which a company offers material inducements to the buyer while pretending to stick to the concerted formula under which no bid at any given point of delivery will be better than any other bid at the same point. Such methods are abhorred by each member of the industry when used by others to his disadvantage. They violate the so-called ethics by which all the brotherhood is bound together against the consumer.

A chiseler is an unreconstructed capitalist who fails to obey the rules of the monopoly. He may also be dishonest in his methods, but chiseling and dishonesty are not identical, and the distinction is vital. To accuse a person of dishonesty may be necessary and in the public interest. To use the word "chiseler," however, as meaning merely one who competes by reducing prices without discrimination, is to attack the foundation of free initiative, and to invite autocracy.

The Commission holds no brief for deception, but is convinced that the so-called ethical principle which opposes price competition, forcing it into the form of underhand dealings, is itself contrary to the public interest. We believe that competi-

tion in steel should be brought into the open and protected against reprisals that threaten to drive it back into the dark. Suppression of competition breeds deception; the cure is not punishment but freedom and protection of individual rights.

Unfair competition, in addition to various forms of fraud and misrepresentation, includes specifically the use of discrimination for the purpose of price raiding. The Commission believes, as does a large share of the business world, that price raiding is a form of industrial violence; sound competition cannot be preserved unless price raiding is effectively prevented.

APPROACH TO THE PROBLEM

The Commission considers it to be essential to distinguish between protection of the markets and Government control over business.

Protection works from the outside; its examination of business practices is only for the purpose of enforcing the rules of conduct as required for the protection of freedom. Control penetrates the interior of business, impairing or destroying the exercise of legitimate private initiative.

It is recognized that certain public utilities, including transportation, communication, and domestic power distribution, are in some measure required by technical necessity to operate as monopolies. As monopolies these industries have long been subject to a large measure of public control of their prices, wages, and production schedules; in some cases they have been taken into public ownership. The classification of industries as necessary monopolies should be, in the Commissions' opinion, kept to as narrow limits as technical considerations permit.

It is suggested that in order to protect competitive business, monopolies must be held to exist only by sufferance in the capitalist system, and to be properly subject to public control in all details affecting the public interest.

Public control over monopolies is to be clearly distinguished from regulation of competitive practices, established to give protection to free competition in industry. The latter does not attempt to fix reasonable prices or to interfere with the countless details within each individual private enterprise.

There is reason to believe that most industrial operations are capable of attaining the highest degree of technical efficiency with plants of moderate size. Even though a modern steel plant may be physically large, it is relatively small in comparison with the total steel business of the United States. If monopoly is to be permitted in such industries, the Commission can see no escape from the necessity of removing them from the privileges of free capitalist management and placing them under Government control.

The Commission denies the necessity for such an outcome in the case of steel. We believe that to socialize the iron and steel industry, probably the leader of American business, would be a dangerous precedent. Such an example might easily spread far through the business world, tending to the break-down of private enterprise and the rise of an authoritarian state.

The Commission therefore suggests that the steel industry, which it believes to be capable of reasonably efficient operation without monopoly, should be definitely separated in public policy from the "natural" monopolies, and treated as a free enterprise. As a free enterprise, it should be given an effective protection that will positively assure it of continuous, sound, and wholesome competition. The larger the area of business in which fair competition can be assured, the wider the margin of safety against the loss of both economic and political freedom.

The prevention of identical delivered prices for steel is, in the Commission's opinion, necessary for the restoration of competitive conditions. This involves the necessity for the elimination of the basing-point system, since the purpose and effect of that system is to prevent price competition. It will also be necessary to prohibit any variation or substitute for the basing-point system, the effect of which is to establish identical delivered prices.

It is submitted that the principles to be applied to the steel industry should be those laid down in the Pittsburgh Plus case when the respondents were ordered to cease and desist:

"From quoting for sale or selling in the course of interstate commerce their said rolled-steel products upon any other basing point than that where the products are manufactured or from which they are shipped.

"From selling or contracting for the sale of or invoicing such steel products in the course of interstate commerce without clearly and distinctly indicating in such sales, or upon such contracts or invoices, how much is charged for such steel products f. o. b. the producing or shipping point, and how much is charged for the

actual transportation of such products, if any, from such producing or shipping point to destination."

The open f. o. b. mill price system is essential, in the Commission's opinion, for the maintenance of fair competition in steel. To fulfill this purpose, however, there must be no obligation to maintain any announced price for any time whatsoever. Further detailed regulations required for the protection of any open market need not be listed at length in this preliminary discussion.

The fact that sound conditions can be restored only with considerable trouble and expense is not a sufficient reason for doing nothing, nor for adopting irritating but ineffective half measures. The capitalist system of free initiative is not immortal, but is capable of dying and of dragging down with it the system of democratic government. Monopoly constitutes the death of capitalism and the genesis of authoritarian government.

The steel industry is a focal center of a monopolistic infection which, if not eradicated, may well cause the death of free capitalistic industry in the United States. This Commission is invested by law with the duty of assisting in the protection of competitive capitalism and in its restoration to health. Whatever such protection may cost, we believe it will be less costly to capitalism and to freedom than any alternative.

[Exhibits 359 to 370, inclusive, will be found in part 6]

EXHIBIT No. 371

[Bureau of the Census, Department of Commerce]

*Sulphur acid (expressed as 50° B.) consumed in the United States, 1933-37, by industries, in short tons*¹

	1933	1934	1935	1936	1937
Fertilizer.....	1,206,000	1,396,000	1,343,000	1,463,000	1,943,000
Petroleum refining.....	1,140,000	1,100,000	989,000	1,100,000	1,210,000
Chemicals.....	725,000	910,000	940,000	985,000	1,060,000
Coal products.....	468,000	500,000	625,000	770,000	860,000
Iron and steel.....	390,000	475,000	630,000	700,000	780,000
Other metallurgical.....	360,000	400,000	520,000	600,000	640,000
Paints and pigments.....	170,000	330,000	400,000	450,000	525,000
Explosives.....	140,000	180,000	175,000	222,000	230,000
Rayon and cellulose.....	219,000	256,000	303,000	330,000	380,000
Textiles.....	90,000	75,000	90,000	108,000	112,000
Miscellaneous.....	223,000	290,000	342,000	380,000	406,000
	5,131,000	5,912,000	6,348,000	7,108,000	8,146,000

¹ Figures, except those for fertilizer industry, from Chem. and Met. Eng., February 1938, p. 83, and from earlier annual review issues.

EXHIBIT No. 372

[U. S. Bureau of Mines Minerals Yearbook]

Quantities and percentages of sulphuric acid produced in the United States from various raw materials for the years 1925, 1927, 1929, 1931, 1933, and 1934

Source of Sulphur	1925		1927	
	Tons Produced	Per Cent of Total	Tons Produced	Per Cent of Total
Sulphur (Brimstone).....	4, 570, 000	65. 2	4, 730, 000	64. 4
Metallurgical Gas.....	1, 091, 288	15. 6	1, 111, 778	15. 2
Pyrite.....	1, 342, 824	19. 2	1, 494, 017	20. 4
Totals.....	7, 004, 112	-----	7, 335, 795	-----

Source of Sulphur	1929		1931	
	Tons Produced	Per Cent of Total	Tons Produced	Per Cent of Total
Sulphur (Brimstone).....	5, 850, 000	68. 9	4, 053, 242	66. 6
Metallurgical Gas.....	1, 534, 696	18. 1	1, 078, 411	17. 7
Pyrite.....	1, 106, 418	13. 0	953, 589	15. 7
Totals.....	8, 491, 114	-----	6, 085, 242	-----

Source of Sulphur	1933		1934	
	Tons Produced	Per Cent of Total	Tons Produced	Per Cent of Total
Sulphur (Brimstone).....	3, 198, 000	62. 2	3, 685, 000	65. 1
Metallurgical Gas.....	820, 000	15. 9	750, 000	13. 2
Pyrite.....	1, 130, 000	21. 9	1, 225, 000	21. 7
Totals.....	5, 148, 000	-----	5, 660, 000	-----

EXHIBIT No. 373

[United States Bureau of Mines Minerals Yearbooks]

Sulphur consumed in the United States, 1927-1937, by uses, in long tons¹

Use	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Chemicals.....	523,000	555,000	598,000	504,000	355,000	321,000	491,000	512,000	555,000	620,000	777,000
Fertilizer and insecticides.....	300,000	245,000	415,000	418,000	254,000	155,000	212,000	217,000	239,000	206,000	415,000
Pulp and paper.....	290,000	250,000	265,000	235,000	178,000	153,000	197,000	176,000	204,000	260,000	302,000
Explosives.....	65,000	60,000	67,000	48,000	39,000	27,000	37,000	43,000	42,000	53,000	68,000
Dyes and Coal-Tar Products.....	40,000	42,000	47,000	41,000	39,000	34,000	40,000	34,000	39,000	46,000	49,000
Rubber.....	35,000	40,000	43,000	31,000	23,000	18,000	24,000	30,000	33,000	39,000	37,000
Paint and Varnish.....	3,000	5,000	5,000	4,500	4,000	4,000	4,000	4,000	48,000	54,000	64,000
Food Products.....	3,000	5,000	5,000	4,500	4,700	4,000	4,000	4,000	4,000	4,500	6,000
Miscellaneous.....	118,000	123,000	136,700	110,600	72,000	40,000	75,000	60,000	68,500	78,000	82,000
Total.....	1,349,000	1,325,000	1,581,700	1,396,600	698,700	756,000	1,114,000	1,110,000	1,232,500	1,420,500	1,800,000

¹ Mineral Yearbooks.

EXHIBIT No. 374

*Sulphur*¹

[000 long tons]

Year	United States production	United States Shipped ²	Imports	Exports	Price at Mina ³
1903.....	(⁴)	(⁴)	189	(⁴)	(⁴)
04.....	85	(⁴)	125	3	(⁴)
05.....	220	(⁴)	83	12	(⁴)
06.....	295	(⁴)	72	14	(⁴)
07.....	189	(⁴)	20	36	(⁴)
08.....	364	(⁴)	20	28	(⁴)
09.....	274	(⁴)	29	37	(⁴)
1910.....	247	(⁴)	29	31	(⁴)
11.....	205	254	24	28	\$18.00
12.....	788	305	27	58	17.34
13.....	491	319	15	89	17.61
14.....	418	341	24	98	18.17
15.....	521	294	25	37	16.86
16.....	650	767	21	129	15.96
17.....	1,134	1,120	.973	153	21.41
18.....	1,354	1,267	.055	131	21.99
19.....	1,191	687	.077	225	15.11
1920.....	1,255	1,518	.044	477	19.76
21.....	1,879	954	.004	286	17.81
22.....	1,831	1,344	.167	486	16.37
23.....	2,036	1,619	.465	473	16.06
24.....	1,221	1,537	1	482	16.26
25.....	1,409	1,858	.100	629	15.61
26.....	1,890	2,073	.048	577	17.99
27.....	2,112	2,073	3	789	18.48
28.....	1,982	2,083	5	685	18.00
29.....	2,362	2,437	1	855	17.97
1930.....	2,559	1,990	.029	593	17.98
31.....	2,129	1,376	-----	408	18.00
32.....	890	1,109	-----	353	18.00
33.....	1,406	1,637	5	523	18.00
34.....	1,421	1,614	6	507	18.00
35.....	1,633	1,635	2	402	18.00
36.....	2,016	1,969	.530	547	18.00
37.....	2,742	2,467	.398	644	18.00

¹ United States Department of Commerce, Bureau of Mines, Minerals Yearbooks.² Domestic and Export.³ Per long ton.⁴ Figures not available.

EXHIBIT No. 375

*Pyrite prices*¹

[Average for the year]

	Imported Pyrites Cents per Unit f. a. f. U. S. ports		Imported Pyrites Cents per Unit f. a. f. U. S. ports
1922.....	13	1930.....	13
23.....	12. 25	31.....	12
24.....	12	32.....	12
1925.....	11. 5	33.....	12
26.....	12	34.....	12
27.....	12. 75	1935.....	12
28.....	13	36.....	12
29.....	13	37.....	12
		38.....	12

¹ From item 1, appendix B, Price Data of Texas Gulf Sulphur Company's report to the Federal Trade Commission.

EXHIBIT No. 376

Sulphur—Cost of production

	Freeport Sulphur Company	Texas Gulf Sulphur Company	Union Sulphur Company
1906.....			¹ \$7.72
1917.....	¹ \$6.15		¹ 5.71
1927.....	² 6.07		
1928.....	² 5.71		
1929.....	² 5.98	¹ \$5.27	
1930.....	6.79	5.77	
1931.....	6.17	5.75	
1932.....	6.15	6.11	
1933.....	5.64	6.22	
1934.....	6.51	5.52	
1935.....	6.23	5.54	
1936.....	5.77	5.43	
1937.....	5.93	5.18	
Average 1929-37.....	6.13	5.64	

¹ Report of The Italian Commission.² Federal Trade Commission Study, 1917.³ Company's own figures as reported to Moody's Manual.⁴ Figures for 1929 to 1937 are computed by dividing "Inventories" (at cost) as reported to Moody's Manual of Investments by "Total Stock on Hand" as reported to the Federal Trade Commission.⁵ Figures for 1929 to 1937 are computed by dividing "Inventory of Sulphur Above Ground (at cost)," as reported to Moody's Manual of Investments by "Total Inventory" as reported to the Federal Trade Commission.

EXHIBIT No. 377

OFFICERS AND DIRECTORS OF THE TEXAS GULF SULPHUR COMPANY¹ (1938)

Officers: W. H. Aldridge, Pres.; Wilber Judson, Vice Pres.; C. F. Ayer, Vice Pres.; H. F. J. Knobloch, Sec. & Treas.

Directors: W. H. Aldridge, C. F. Ayer, H. B. Baruch, George Whitney, C. M. Wooley, Wilbur Judson, H. F. J. Knobloch, T. S. Lamont, H. S. Mudd.

EXHIBIT No. 378

TEXAS GULF SULPHUR COMPANY, INTERLOCKING DIRECTORSHIPS² (1937)

Aldridge, Walter Hull (Born 1867, Brooklyn, N. Y.—Columbia Univ. 1887)—Pres. & Dir., Texas Gulf Sulphur Co., 75 E. 45th St., New York City. Residence, Weaver St. & Quaker Ridge Road, New Rochelle, N. Y.

Johns-Manville Corp., Dir.

Bankers Trust Co., Member Advisory Comm.

United Verde Copper Co., Dir.

Ayer, Charles Frederick (Born 1863, Marysville, Cal.)—Pres. & Dir., Newmont Mining Corp., 14 Wall St., New York City. Residence, 1 Slocum St., New Rochelle, N. Y.

Magma Copper Co., Pres. & Dir.

Magma Arizona R. R. Co., Pres. & Dir.

Texas Gulf Sulphur Co., V-P. & Dir.

Continental Oil Co. (Del.), Dir.

Gray Eagle Copper Co., Pres. & Dir.

Hudson Bay Mining & Smelting Co., Ltd., Dir.

Boyce Thompson Institute for Plant Research, Inc., Member, Vice-Chrm. & Dir.

Baruch, Herman B.—Partner, H. Hentz & Co., 60 Beaver St., New York City. Residence, 14 East 69th St., New York City.

New York Stock Exchange, Governor.

Texas Gulf Sulphur Co., Dir.

¹ Moody's Manual of Investments, 1933.² Moody's Manual of Investments, 1937.

- Judson, Wilber (Born 1880, Lansing, Mich.—Harvard Univ. 1901)—V-P & Dir., Texas Gulf Sulphur Co., 75 East 45th St., New York City and Newgulf, Texas. Residence, Newgulf, Texas.
Sulphur Export Corp., Dir.
- Knobloch, Henry F. J. (Born 1877, Jersey City, N. J.—New York Univ. Law School 1897—N. Y. Law School 1898—F. & A. M., Shrine)—Sec., Treas. & Dir., Texas Gulf Sulphur Co., 75 East 45th St., New York City. Residence, Orient, N. Y.
Sulphur Export Corp., Dir.
- Lamont, Thomas Stilwell (Born 1899, Englewood, N. J.—Harvard Univ. 1921)—Partner, J. P. Morgan & Co., 23 Wall St., New York City. Residence, 101 East 72nd St., New York City.
Continental Oil Co., Dir.
Texas Gulf Sulphur Co., Dir.
Phelps Dodge Corp., Dir.
- Mudd, Harvey S. (Born 1888, Leadville, Colo.—Columbia Univ. 1912)—1206 Pacific Mutual Bldg., Los Angeles, Cal. Residence, 1240 Benedict Canon Drive, Beverly Hills, Cal.
Texas Gulf Sulphur Co., Dir.
Cyprus Mines Corp., Pres. & Man. Dir.
Mayflower Associates, Inc., Dir.
Calaveras Cement Co., Dir.
Mesabi Iron Co., Dir.
Pacific Alkali Co., Pres. & Dir.
- Whitney, George—Partner, J. P. Morgan & Co., 23 Wall St., New York City, and Drexel & Co., Philadelphia, Pa. Residence, Westbury, N. Y.
Alaska Development & Mineral Co., Dir.
Bank for Savings, Trustee.
Braden Copper Co., Dir.
General Motors Corp., Dir.
Guaranty Trust Co. of New York, Dir.
Kennecott Copper Corp., Dir.
Pullman Co., Dir.
Utah Copper Co., Dir.
Teachers Insurance & Annuity Assn., Trustee.
Texas Gulf Sulphur Co., Dir.
Johns-Manville Corp., Dir.
United Corporation, Dir.
Continental Oil Co., Dir.
Pullman Incorporated, Dir.
Consolidated Edison Co. of N. Y., Trustee.
Alaska Steamship Co., Dir.
New York Edison Co., Inc., Dir.
New York Central R. R., Dir.
- Woolley, Clarence M. (Born 1863, Detroit, Mich.)—Chrm. of Board, Pres. & Dir., American Radiator & Standard Sanitary Corp., 40 West 40th St., New York City. Residence, Greenwich, Conn.
American Radiator Co., New York City, Chrm. of Board & Dir.
Atchison, Topeka & Santa Fe Ry. Co., Dir.
Atlantic Mutual Insurance Co., New York City, Dir.
Continental Insurance Co., Dir.
Delaware, Lackawanna & Western R. R. Co., Member Board of Mgrs.
Federal Reserve Bank, N. Y., Dir.
General Electric Co., Dir.
General Motors Corp., Dir.
Gold Dust Corp., Dir.
International General Electric Co., Inc., Dir.
Johns-Manville Corp., Dir.
Mutual Life Insurance Co. of N. Y. Trustee.
Texas Gulf Sulphur Co., Dir.

Notes on Corporate Relationships, Texas Gulf Sulphur Company:

Nine directors of Texas Gulf Sulphur Company hold fifty-nine directorships, an average of six and two-thirds percent each. One director of Texas Gulf Sulphur Company holds eighteen directorships; one holds thirteen; one holds eight; four have six or more.

Represented on the Board of Directors of Texas Gulf Sulphur Company are thirteen mining companies; three oil companies; three rubber companies.

Notable companies represented by interlocking directorships with Texas Gulf Sulphur Company:

J. P. Morgan (two partners).
 Johns-Manville (three).
 Continental Oil (three).
 General Motors (two).
 Bankers Trust Company.
 General Electric Company.
 Guaranty Trust Company.
 Kennecott Copper.
 Consolidated Edison.
 New York Edison.
 New York Central Railway.
 The Pullman Company.
 American Radiator and Standard Sanitary.
 The Atchison, Topeka and Santa Fe Railway.
 Federal Reserve Bank of New York City.

EXHIBIT No. 379

OFFICERS AND DIRECTORS OF THE FREEPORT SULPHUR COMPANY¹ (1938)

Officers: J. H. Whitney, Chairman; L. M. Williams, Jr., Pres.; W. T. Lundy, V. P.; J. T. Claiborne, Jr., V. P.; Lewis Mims, V. P.; P. E. Neaman, Sec.; R. K. Shirley, Treas.; M. B. Gentry, Asst. to the President. H. B. Johns, H. S. Burns, D. T. McIver, Assistant Vice Presidents. L. H. Follett, J. G. Adamson, T. J. Knapp, Assistant Secretaries. G. H. Nichols, Asst. Treas.

Directors: G. G. Battle, E. G. Diefenbach, D. M. Goodrich, L. C. Morton, V. G. Paradise, G. S. Rockefeller, W. S. S. Rodgers, C. D. Stillman, E. K. Thaete, E. S. Webster, Jr., J. H. Whitney, L. M. Williams, Jr., F. A. Wills.

EXHIBIT No. 380

FREEPORT SULPHUR COMPANY, INTERLOCKING DIRECTORSHIPS² (1937)

Battle, George Gordon (Born 1868, North Carolina—University of Virginia—F. & A. M.; B. P. O. E.)—Partner, Battle, Levy, Van Tine & Fowler, 37 Wall St., New York City. Residence, 850 Park Ave., New York City.

Freeport Texas Co., Dir.
 Freeport Sulphur Co., Dir.
 Cuban American Manganese Corp., Dir.
 Sulphur Export Corp., Dir.
 Colonial Ice Co., Dir.

Diefenbach, Elmer G. (Born 1893, Ebenezer, N. Y.—New York Univ. 1917)—V. P. & Dir., Bancamerica-Blair Corp., 44 Wall St., New York City. Residence, 1100 Park Ave., New York City.

Freeport Texas Co., Dir.
 Cuban-American Manganese Corp., Dir.
 Electric Ferries Inc., New York City, Pres. & Dir.

Goodrich, David Marvin (Born 1876, Akron, Ohio—Harvard Univ. 1898)—230 Park Ave., New York City. Residence, Mt. Kisco, N. Y.

B. F. Goodrich Co., Chrm. of Board & Dir.
 Commercial Solvents Corp., Dir.
 American Metal Co. of New Mexico, Dir.
 Freeport Texas Co., Dir.
 Sulphur Export Corp., Dir.

Morton, Lindley C.—600-7 Webb Crawford Bldg., Birmingham, Ala. Residence, 2506 Linden St., Birmingham, Ala.

First National Bank, Birmingham, Ala., Dir.
 Birmingham Fire Insurance Co., Dir.
 Protective Life Insurance Co., Dir.
 Cuban American Manganese Corp., Dir.
 Pacific Southern, Inc., Dir.
 Freeport Texas Co., Dir.

¹ Moody's Manual of Investments, 1938.

² Moody's Manual of Investments, 1937.

- Mountain Brook Land Co., Dir.
Investment Co. of America, Detroit, Mich., Dir.
America Capital Corp., Los Angeles, Cal., Dir.
Alabama Great Southern Ry., Dir.
- Paradise, Victor George (Born 1895, St. Louis)—Partner Frazier Jelke & Co.,
40 Wall St., New York City. Residence, 983 Park Ave., New York City.
- Paradise, Victor George.
Freeport Texas Co., Dir.
Eagles Nest Corp., V. P. & Dir.
- Rockefeller, Godfrey S.—With Clark, Dodge & Co.; 61 Wall St., New York City.
Residence, Greenwich, Conn.
Freeport Texas Co., Dir.
Tobacco & Allied Stocks, Dir.
- Rodgers, William S. S. (Born 1886, Columbus, Ohio—Yale Univ. Sheffield 1907)—
Pres. & Dir., Texas Co. (Del.), 135 East 42nd St., New York City. Residence,
277 Park Ave., New York City.
Texas Corp. (Del.), Pres. & Dir.
California Petroleum Corp. (Va.), Pres. & Dir.
Texas Co. (Cal.), Dir.
Texas Co. of Canada, Ltd. (Canada). Pres. & Dir.
Indian Refining Co. (Maine), Pres. & Dir.
Texas Co. (Del.), Pres. & Dir.
Freeport Texas Co., Dir.
Texas Petroleum Co., Pres. & Dir.
Goodyear-Wende Oil Corp. (N. Y.), Dir.
Great Lakes Pipe Line Co. (Del.), Dir.
South America Gulf Oil Co., V. P. & Dir.
Colombian Petroleum Co., Dir.
Jeffrey Mfg. Co., Dir.
- Stillman, Claude D. (Born 1884, Wisconsin—Milton College 1909—F. & A. M.)—
Sec., Clement K. Quinn Ore Co., 1500 Alworth Bldg., Duluth, Minn. Residence,
5519 London Road, Duluth, Minn.
Quinn Stone & Ore Co., Ltd., Sec.
Empire Quinn Mining Co., Sec.
Canam Metals, Ltd., Sec. & Treas.
Amex Mining Co., Sec.
United Gold Mines Corp., Asst. Sec. & Asst. Treas.
- Thaete, Edward H. (Born 1876, Philadelphia, Pa.)—With F. E. Ristine & Co.,
123 S. Broad St., Philadelphia, Pa. Residence, Mayfair House, Lincoln Drive
& Johnson St., Philadelphia, Pa.
Freeport Texas Co., Dir.
- Webster, Edwin S., Jr. (Born 1899, Newton, Mass.—Harvard College 1923)—
Senior Partner, Kidder, Peabody & Co., 17 Wall St., New York City. Residence,
307 Hammond St., Chestnut Hill, Mass.
Stone & Webster, Inc., Dir.
Stone & Webster Service Corp., Dir.
Stone & Webster Engineering Co., Dir.
Railway & Light Securities Co., Dir.
Stone & Webster Realty Corp., Dir.
Florida Bus & Terminal Corp., Dir.
Freeport Texas Co., Dir.
Investment Service Corp., Dir.
Florida Assets Corp., Dir.
Florida Motor Lines, Inc., Dir.
Chicago, Wilmington & Franklin Coal Co., Dir.
- Whitney, John Hay—14 Wall St., New York City. Residence, 972 5th Ave.,
New York City.
Great Northern Paper Co., Dir.
Freeport Texas Co., Chrm. of Board & Dir.
Pan American Airways, Dir.
Pioneer Pictures, Pres. & Dir.
Selznick International Pictures, Inc., Chrm. of Board & Dir.
News-Week Inc., Dir.

Williams, Langbourne M., Jr. (Born 1903, Richmond, Va.—Univ. of Virginia 1924; Harvard Univ. Business School 1926)—Pres. & Dir., Freeport Texas Co., 122 E. 42nd St., New York City.
 Freeport Sulphur Co., Pres. & Dir.
 Virginia Central Ry., Pres. & Dir.
 Cuban-American Manganese Corp., Pres. & Dir.
 Southern Churchman Co., Dir.

Wills, Frank A.—V. P. & Dir., Supplee-Wills-Jones Milk Co., 1523 N. 26th St., Philadelphia, Pa. Residence, Pelham Court, Germantown, Philadelphia, Pa.
 National Dairy Products Corp., V. P. & Dir.

Lundy, Wilson Thomas—V. P. & Dir., Freeport Sulphur Co., 122 E. 42nd St., New York City. Residence, 5355 St. Charles Ave., New Orleans, La.

Claiborne, John Tyler, Jr. (Born 1902, Forth Worth, Tex.—Washington Univ.)—V. P. & Dir., Freeport Sulphur Co., 122 East 42nd St., New York City. Residence, 1261 Madison Ave., New York City.
 Cuban-American Manganese Corp., New York City, V. P.
 Freeport Texas Co., New York City, V. P.

Neaman, Pearson E. (Born 1903, Pittsburgh, Pa.—Harvard Univ. 1924)—Partner, Battle, Levy, Van Tine & Fowler, 37 Wall St., New York City. Residence, 7 Gracie Square, New York City.
 Freeport Texas Co., Sec.
 Freeport Sulphur Co., Sec. & Dir.
 Cuban American Manganese Corp., Sec.

Shirley, Robert K.—Treas., Freeport Texas Co., 122 East 42nd St., New York City. Residence, 43 Gateway Drive, Great Neck, Long Island, New York.
 Freeport Sulphur Co., Treas.

Notes on corporate relationships of Freeport Sulphur Company Directors:
 Fifteen directors of Freeport hold seventy-eight directorships; or an average of five and one-fifth each. One Freeport director holds fourteen directorships; one holds eleven; one holds ten; eight hold five or more each.

Represented on the board of directors of Freeport Sulphur Company are eleven oil companies; seven mining companies; two movie companies; one metals; one rubber; and one paper company.

Notable companies represented by interlocking directorships:
 B. F. Goodrich and Company.
 The Texas Corporation.
 Stone and Webster.
 Commercial Solvents.
 Pan-American Airways.
 Great Northern Paper Company.

EXHIBIT No. 381

AGREEMENT¹ BETWEEN THE SULPHUR EXPORT CORPORATION
 AND THE UFFICIO PER LA VENDITA DELLO ZOLFO ITALIANO

(Dated August 1st, 1934)

This agreement made this first day of August 1934, between the Sulphur Export Corporation of the State of Delaware, United States of America, hereinafter called the Export Corporation party of the first part, and the Ufficio Per La Vendita Dello Zolfo Italiano a compulsory sales office for all Italian crude sulphur, created by Italian Royal Decree Law of 11th December 1933, No. 1699, hereinafter called the Ufficio party of the second part, witnesseth:

Duration.—This agreement shall continue from year to year beginning August 1st, 1934, it being understood however, that either party may terminate this agreement at any date upon giving six months notice in writing to the other of such intention.

It is also understood and agreed that in the event of any material increase in the present production of elementary sulphur from pyrites this agreement shall be cancelled and become nul and void three months after commencement of such increased production.

¹ This is a revival of the 1923 agreement which was ineffective after dissolution of the Sicilian consortium in 1932.

It is also understood and agreed that in the event of any new source or new production of elementary sulphur other than from pyrites as heretofore provided arising outside the control of either party which in the opinion of either party may be considered as nullifying or materially detracting from the benefits derived from this agreement then the matter shall be promptly discussed and if no agreement pertaining thereto is reached this agreement shall automatically expire at the end of the third month thereafter.

It is also understood and agreed that in the event of a material change occurring in the present gold value of the U. S. dollar which in the opinion of either party may be considered as nullifying or materially detracting from the benefits derived from this agreement then the matter shall be promptly discussed and if no agreement pertaining thereto is reached this agreement shall automatically terminate thirty days after such failure to reach agreement.

Tonnage.—In all the following articles of this agreement dealing with the division or allocation of tonnage, all exports made by other Italian producers or sellers of sulphur shall be included as part of the quota of the Ufficio; and the Ufficio guarantees that Italian producers and sellers of sulphur other than the Ufficio will not export sulphur for acid-making at a reduced price. All exports to the markets covered by this agreement of sulphur produced by the Jefferson Lake Oil Company from their sulphur mine in Iberia Parish in the State of Louisiana and of sulphur produced by the Duval Texas Sulphur Company from their palangana mine in the State of Texas shall for the purpose only of determining quotas and tonnage be considered as made by the Export Corporations.

Markets.—This agreement refers to and covers all sales of sulphur made by the two parties to all countries of the world excepting only:

- (1) The Kingdom of Italy, its dependencies and colonies and
- (2) North America, Cuba, the Islands off the coast of Canada and the insular possessions of the United States of America.

Division of tonnage.—Subject to the conditions and agreements herein set forth all export sales of the two parties to the markets covered by this agreement shall be apportioned on the basis of allowing—

- (1) The Export Corporation and the Ufficio each 50% of the first 480,000 tons of annual invoiced sales;
- (2) The Export Corporation 75% plus 5,000 tons and the Ufficio 25% minus 5,000 tons of annual invoiced sales in excess of 480,000 tons up to 625,000 tons;
- (3) The Export Corporation 90% and the Ufficio 10% of annual invoiced sales in excess of 625,000 tons.

The expression "annual invoiced sales" in this clause shall be understood to include all exports of manufactured sulphur from the United States and from the Kingdom of Italy to all countries covered by the agreement as above. For the purpose only of determining quotas or tonnage as herein set forth all exports of manufactured sulphur from the United States and from the Kingdom of Italy to all countries covered by the agreement as above shall also be included.

In making current determinations of allocation of crude sulphur the exports of manufactured sulphur from the Kingdom of Italy shall first be deducted from the share of the Ufficio and similarly the exports of manufactured sulphur from the United States shall first be deducted from the share of the Export Corporation.

For example, assuming the total amount of invoiced sales of crude sulphur plus exports of manufactured sulphur for one year under this agreement is 480,000 tons of which amount 70,000 tons is manufactured sulphur exported from the Kingdom of Italy and 5,000 tons is manufactured sulphur exported from the United States the proportion of each of the parties of the total 480,000 tons being 50% or 240,000 tons, there shall be deducted from the Ufficio's quota of 240,000 tons the amount of manufactured sulphur exported from the Kingdom of Italy, to wit 70,000 tons, leaving a balance of 170,000 tons of crude sulphur to be sold by the Ufficio; there shall likewise be deducted from the Export Corporation's quota of 240,000 tons the amount of manufactured sulphur exported from the United States to wit 5,000 tons leaving a balance of 235,000 tons of crude sulphur to be sold by the Export Corporation making a total of 405,000 tons of crude sulphur to be sold by the parties jointly, the percentages being approximately 41.97% for the Ufficio and 58.03% for the Export Corporation.

For second example, assuming the total invoiced sales for one year to be in excess of 480,000 tons but less than 625,000 tons, say 580,000 tons, 50% of the first 480,000 tons gives the Ufficio 240,000 tons plus 25% less 5,000 tons of the remaining 100,000 tons, to wit 20,000 tons, a total Ufficio quota of 260,000 tons, and assuming the same figures for manufactured sulphur as in the preceding example, then the amount of crude sulphur to be sold by the Ufficio would be

190,000 tons and the amount of crude sulphur to be sold by the Export Corporation would be 315,000 tons, the percentages being approximately 37.62% for the Ufficio and 62.38% for the Export Corporation.

For third example, assuming the total invoiced sales for one year to be in excess of 625,000 tons, say 725,000 tons, 50% of the first 480,000 tons gives the Ufficio 240,000 tons, 25% minus 5,000 tons of 145,000 tons gives the Ufficio 31,250 tons, and 10% of 100,000 tons gives the Ufficio 10,000 tons, being a total Ufficio quota of 281,250 tons, and assuming the same figures for manufactured sulphur as in the two preceding examples then the amount of crude sulphur to be sold by the Ufficio would be 211,250 tons and the amount of crude sulphur to be sold by the Export Corporation would be 438,750 tons the percentages being approximately 32.50% for the Ufficio and 67.50% for the Export Corporation.

Sulphur for the manufacture of sulphuric acid.—It is the judgment of both parties that the sale of a certain tonnage of sulphur at a special price solely for the manufacture of sulphuric acid is in their mutual interest. Any such sales of sulphur for the manufacture of sulphuric acid shall be made only by mutual agreement of the parties and the terms and conditions thereof shall likewise be mutually agreed. The Export Corporation having made known to the Ufficio the existence of a contract dated February 1st, 1934, between the Export Corporation and the National Sulphuric Acid Association, Ltd., London, covering a sale of 100,000 tons for delivery over two or 2½ years at the said Association's option, the Ufficio undertakes during the life of this agreement to supply a proportion of the sulphur to be delivered against the said contract at the price and under the terms therein stated and other details and conditions as to sampling and analysis to be agreed upon, the said proportion of the Ufficio to be:

(1) If the invoiced sales under said contract do not exceed 35,000 tons in any one year the Ufficio will furnish 50%;

(2) If such invoiced sales exceed 35,000 tons in any one year the Ufficio shall supply its share of such excess over 35,000 tons in the proportion laid down in section (2) of the article of this agreement entitled Division of Tonnage.

The tonnage supplied by both parties under the said contract shall form part of the total annual invoiced sales as figured in the article hereof entitled Division of Tonnage.

Effective date.—The effective date of this agreement is August 1st, 1934. The first year under this agreement shall begin on such date and shall end on July 31st, 1935; all succeeding years shall begin on August 1st and end on July 31st. All shipments and/or deliveries made on and after August 1st, 1934, either from stock in warehouse or otherwise shall be included in the computation of tonnage and quotas.

Prices.—The prices, which at all times are to be such as will foster the sale of high-grade sulphur produced by the parties hereto in competition with pyrites and/or sulphur produced by others and/or substitutes for elementary sulphur, shall, together with terms and conditions of all sulphur sold under this agreement, be fixed from time to time by the parties having regard to changing conditions, in such manner as best to serve their mutual interests.

Allocation.—The allocation or distribution of tonnage sold under this agreement shall be fixed from time to time in such manner as may afford each party the advantages of freight rates and market conditions arising by reason of geographical location with regard to the market served, insofar as this may be done without prejudice to the other party; but each party shall be entitled to its proportionate share of crude sulphur under this agreement of any market upon request to the other, and each party shall be obligated to take its said proportionate share in any low-priced markets upon request of the other.

In order to effectuate this purpose and to facilitate the operations to the mutual and best interests of both parties, they shall each appoint an assistant executive representative, resident in Europe who shall constitute a central bureau for the exchange of data and compilation of statistics and shall assist in the allocation and distribution of tonnage and have such other functions as shall from time to time be assigned them by the parties for the furtherance of the purposes of this agreement. Each party shall promptly furnish to the Central Bureau copies of all contracts and invoices made by it and a note of shipments to warehouses and shipments of manufactured sulphur in the business covered by this agreement. Where in competitive markets the actions of the agents of the respective parties may become detrimental to the best interests of either of the parties hereto all the business under this agreement shall be transacted through the Central Bureau for such time as may by the parties be decided upon as proper.

Adjustments of tonnage and of sales shall be made for the period ending January 31st, 1935, and for each successive period of six months. If at the termination of any such six-month period it is determined that either party has not sold its full quota as provided herein, or that adjustments in distribution and allocation of tonnage are necessary, such deficiency and necessary adjustments shall be made up within the next succeeding six-month period.

If at any time this agreement shall come to an end the final adjustment shall be made in cash at the average price f. o. b. the respective shipping ports for the period to which the adjustment refers, realized under this contract by the party to whom the cash shall be paid. The party to whom the cash shall be paid will hold the corresponding tonnage of sulphur at the disposal of the other party for six months free of any charge including insurance, and will deliver it f. o. b. the respective shipping ports at the other party's request. This tonnage of sulphur shall not be sold in the territories excluded from the world's crude sulphur market as defined under this agreement.

Statistical.—On or before the thirtieth of each month each party shall furnish to the other, and to the Central Bureau a statement covering the operations of the preceding calendar month which shall show the total tonnage shipped, total tonnages sold and total tonnage delivered, destinations, prices realized, both f. a. s. and/or f. o. b. and/or c. i. f. and/or c. f., freight rates paid and such other information as may be from time to time necessary for proper forecast and allocation.

Penalty for violations.—In case either party shall directly or indirectly export any sulphur or permit the export of any sulphur to the territories covered by this agreement otherwise than as herein provided, for each ton so exported there shall be a reduction in such offending party's allocation provided for herein of two tons, and an increase in the allotment of the other party of two tons.

Manufactured sulphur.—It is the judgment of both parties that the situation of the sulphur-manufacturing industry in the countries covered by this agreement should be maintained as it at present exists throughout the life of this agreement; each party agrees not to do or encourage anything which would result in altering such present situation and any action of a nature to alter such present situation shall be jointly considered and both parties shall use their best endeavors to present any such alteration.

Force majeure.—If by reason of force majeure either party is unable to ship its yearly quota or tonnage in such event a revision of allocation to meet the situation as created thereby will be made so as to adjust the matter equitably.

Arbitration.—In case of a disagreement arising out of any matter in connection with the construction of this agreement or performance thereof, which it may be found impossible to settle by amicable arrangement, the same shall be submitted to a Board of Arbitration to sit in London consisting of three members; one chosen by the Export Corporation, one by the Ufficio, and an Umpire to be chosen by the joint agreement of the first two arbitrators.

In case of any party failing to appoint its arbitrator within fifteen days of the notice of the other party so to do, the party who has appointed an arbitrator may appoint that arbitrator to act as sole arbitrator in the reference, and his award shall be binding on both parties as if he had been appointed sole arbitrator by consent.

In case of the first two arbitrators failing to agree within fifteen days of their nomination as to the appointment of the Umpire, such appointment shall be made by the President for the time being of the London Chamber of Commerce upon request of either of the parties.

Insofar as not specially provided for in the present agreement the arbitration shall be subject to the English Arbitration Act of 1889 or any statutory modification thereof at the time subsisting.

Any award shall be final and binding upon both parties.

Legalities.—The Agreement shall not be, nor be construed to be in any respect as a partnership or agreement between the Corporations holding shares of stock in the Export Corporation and the Ufficio nor to bind any of such Corporations in any way individually nor the Italian Government.

It is agreed that this contract shall be deemed to have been executed and delivered at the City of London, England, and the interpretation and enforcement thereof shall be governed by the provisions of the English law as it shall from time to time exist and it is agreed that, subject to the provisions hereof respecting arbitration, jurisdiction shall be given to the English Courts to take cognizance of disputes hereunder and to render judgment or decree which shall be binding upon the parties.

Notice and service of process.—Any notice provided to be given hereunder may be given in writing either by delivering the same in a sealed envelope addressed to the Central Bureau representative of the party to be served at the Office of the Bureau, or by service upon such representative in the manner provided by the laws of England for service of legal papers.

In order to make effective the provisions hereof in respect of arbitration and procedure in the English Courts each party shall at all times maintain in the City of London a person or corporation upon whom legal process may be served on behalf of the other party in the manner provided by the laws of England for the service of legal papers with the same force and effect as if due service had been made upon either party at its home office in the country of its incorporation or institution.

In witness whereof both parties have hereunto set their hands and seals the day and year first above written, the present being one of three triplicate originals so executed.

SULPHUR EXPORT CORPORATION,
By C. A. SNIDER, *President*.

Attest:

B. C. HUGHES.

UFFICIO PER LA VENDITA DELLO ZOLFO ITALIANO,
By C. ANGELELLI, *President*.

Attest:

VESPUCCIO CIUCCI.

[Copy]

[Initialled: C. A. S.] [Signed: C. Angelelli.]

AUGUST 1ST, 1934.

From: Sulphur Export Corporation, New York.

To: The Ufficio per la Vendita dello Zolfo Italiano, Rome.

GENTLEMEN: Referring to the agreement this day entered into between us, we herewith set forth certain additional and supplementary matters which have been agreed upon between us, as follows:

(1) *Duration.*—In connection with the provision for cancellation in the event of any material increase in the present production of elementary sulphur from pyrites, specifically such present production is:

	<i>Tons per annum</i>
Orkla.....	70, 000
Rio Tinto.....	30, 000
Mason & Barry.....	10, 000
	<hr/> 110, 000

(2) *Sulphur for the manufacture of sulphuric acid.*—For the purpose of facilitating the agreed division of tonnage to be supplied to the National Sulphuric Acid Association, Ltd., under the contract cited in the article headed "Sulphur for the Manufacture of Sulphuric Acid," the Central Bureau will from time to time receive from the National Sulphuric Acid Association, Ltd., requests for shipments and will then allocate such tonnage to the parties in such manner as is most convenient to the parties and to the National Sulphuric Acid Association, Ltd.

Such allocations to the Ufficio will be evidenced by purchase requisitions signed by B. C. Hughes on behalf of the Sulphur Export Corporation as per sample form attached.

(3) In connection with the article entitled "Prices," the following schedule will be effective until changed by mutual agreement of the parties:

Except in special cases which may be presented and agreed upon all sales to be made c. i. f. The prices shall be in United States dollar currency or equivalent, cash payment—

C. i. f. ports in Europe, except ports in Lithuania, Poland, the port of Danzig, ports in Portugal, France, Spain, Belgium, Jugo-Slavai, Albania, Roumania, Greece, Turkey in Europe, Bulgaria, and U. S. S. R.....	\$23. 00
C. i. f. ports in France and Belgium.....	23. 50

C. i. f. ports in Lithuania, Poland, the port of Danzig, ports in Portugal, Spain, Jugo-Slavia, Albania, Roumania, Greece, Turkey in Europe, Bulgaria, and U. S. S. R.	\$24. 00
C. i. f. ports in Asia	24. 00
C. i. f. ports in Australasia	23. 50
C. i. f. ports in South America	23. 00
C. i. f. ports in Africa excluding Algeria	24. 00
C. i. f. ports in Algeria	23. 50
C. i. f. any other ports not covered above	23. 50

Such prices are understood to be minimum net per ton of 2,240 lbs., delivered weight, and refer to the highest Italian grade (Gialla Superiore—Best Yellow) and to the American quality of crude sulphur.

All sales of lower grades of Italian sulphur are to be made according to the above schedule, conditions and terms, except that a discount or differential may be allowed from the schedule in no case exceeding:

\$0.85 per ton for Gialla Inferiore (Inferior Yellow); \$1.55 per ton for Buona (Good) quality; \$2.25 per ton for Corrente (Current) quality.

(4) In connection with the article entitled "Allocation," the Central Bureau shall be located in London, England, and all expenses thereof except such salary or remuneration as may be paid to the representative thereon of the Ufficio shall be borne by the Sulphur Export Corporation.

To assist in the proper allocation of tonnage each party will promptly file with the Central Bureau a schedule of unfilled orders and copies of all uncompleted contracts as of August 1st, 1934 and copies of all engagements to supply sulphur on or after August 1st, 1934.

In connection with the article entitled "Notice and Service of Process" the Sulphur Export Corporation has conferred upon Mr. Bertie Cameron Hughes of London House, 35 Crutched Friars, London, E. C. 3., authority to accept service of legal process for it and hereby designates him as the party upon whom legal process under the agreement may be served to bind it; and the Ufficio hereby gives authority to Henry Gardner & Co. Ltd., of 2 Metal Exchange Buildings, London, E. C. 3., to accept legal service for it in England and hereby designates said Corporation as the party upon whom legal process under the agreement may be served to bind it.

We will thank you to confirm and accept the above.

Yours truly,

SULPHUR EXPORT CORPORATION,
By (Signed) C. A. SNIDER, *President*.

Confirmed and accepted:

UFFICIO PER LA VENDITA DELLO ZOLFO ITALIANO,
By (Signed) C. ANGELELLI, *President*.

SAMPLE FORM TO BE USED FOR THE PURCHASE REQUISITIONS OF ITALIAN SULPHUR AGAINST THE NATIONAL SULPHURIC ACID ASSOCIATION CONTRACT

To the Ufficio per la Vendita dello Zolfo Italiano:

Please be advised that in accordance with the agreement between us whereunder you are to supply certain tonnage under the contract made by us with the National Sulphuric Acid Association, Ltd., London, dated February 1st. 1934, we now allocate to you ----- tons to be delivered to the order of the National Sulphuric Acid Association, Ltd., at ----- on or about -----.

This allocation constitutes a purchase requisition by us on you and the terms and conditions governing this purchase are as follows:

Price: 75/- per ton of 2,240 lbs. c. i. f. for material containing 99% sulphur dry weight, with pro rata reduction in price for material containing less than 99%—for example if the sulphur furnished contains 97% S. the price is to be arrived at by the formula $75/- \times 97 \div 99$.

Guarantee: You guarantee the sulphur to be free from arsenic and selenium and suitable for the economic manufacture of high grade sulphuric acid, and to contain not less than 96% of pure sulphur.

Sampling: Sampling of the cargo shall be made in the U. K. jointly and at joint expense, by the representatives of the Ufficio and the National Sulphuric Acid Association Ltd. in the usual way. Three samples for sulphur analysis shall be taken in triplicate: one for the receivers, one for the suppliers, and one,

in case of reference, to remain in charge of suppliers agents. Three coarse unground samples shall also be taken for moisture analysis.

Analysis—(a) Procedure: The Ufficio and the National Sulphuric Acid Association shall analyze their respective samples and on the thirtieth day after drawing of samples the result of these analyses shall be exchanged by post between the Ufficio and the National Sulphuric Acid Association, Ltd.

(b) Method: The moisture in the material shall first be ascertained by drying at 100 deg. C. The dried material shall then be extracted by carbon bisulphide, and the residue be considered as inorganic impurity. The carbon bisulphide shall then be evaporated from the dissolved sulphur, and the bitumen (if any) shall be estimated by treatment with strong sulphuric acid.

Agreement of analysis: As regards sulphur, if the suppliers and the purchasers' results agree within 0.75 and the mean is over 96%, the mean to be taken as the agreed figure. If the mean is less than 96%, or if the suppliers and receivers' analyses differ more than 0.75, either party has the right to refer the third sample to an agreed umpire. As regards moisture, if the suppliers and receivers' results agree within 0.25 and the mean is less than 0.50, the mean is to be taken as the agreed figure. If the mean is over 0.50 or the receivers' and suppliers' tests differ by more than 0.25 either party has the right to refer the third sample to the agreed umpire as above.

Both in the case of sulphur content and moisture, if the umpire's result is intermediary between those obtained by the receivers and suppliers, then the umpire's result is to be adopted.

If the umpire's result is above or below both the analyses of the receivers and the suppliers, then the analysis nearest to that found by the umpire shall be adopted. Such umpire to be alternately English and Italian, and to follow in alternate rotation references under the Contract between the National Sulphuric Acid Association, Ltd., and the Consorzio Obbligatorio per l'Industria Solifera Siciliana of 22nd/29th April 1931, N. 285. The expense of such reference to be borne by the party whose analysis differs most from the umpire's result.

Payment: Payment is to be on outturn weights, the Ufficio and the National Sulphuric Acid Association jointly to appoint weighers and to share equally the cost of weighing, the Ufficio being entitled at their expense to appoint superintendents to oversee the weighing.

Payment to be made for 95% of the value of each cargo based on Bill of Lading weights and assuming a sulphur content of 97% on presentation of documents in London, the balance due on each cargo to be paid on final ascertainment of weights and analysis.

In general: This purchase is governed by all the terms wherever applicable of the contract made by us with the National Sulphuric Acid Association Ltd., dated February 1st. 1934, copy of which has been filed with you.

EXHIBIT No. 381-A

[Copy received by Export Division, Federal Trade Commission, Nov. 25, 1924]

AGREEMENT BETWEEN SULPHUR EXPORT CORPORATION AND CONSORZIO OBBLIGATORIO PER L'INDUSTRIA SOLIFERA SICILIANA

(Dated March 14, 1923)

This agreement made this fourteenth day of March 1923, between the Sulphur Export Corporation, a corporation of the State of Delaware, United States of America, hereinafter called the Export Corporation, party of the first part, and the Consorzio Obbligatorio per l'Industria Solifera Siciliana, a compulsory association of all the Sicilian Sulphur producers, created by the Italian law of July 15, 1906, number 333, hereinafter called the Consorzio, party of the second part, Witnesseth:

Duration.—This agreement shall continue for a period beginning October 4, 1922, and ending September 30, 1926, and shall be automatically renewed for consecutive periods of four years each, beginning with October 1, 1926, unless denounced by either party within six months of the expiration of the first period, or within six months of the expiration of any succeeding period, it being understood, however, that either party may terminate this agreement as of any March 31 or any September 30, during the term thereof, upon giving not less than six months notice in writing to the other of such intention.

Tonnage.—In all the following articles of this agreement dealing with the division or allocation of tonnage, all exports made by other Italian producers or sellers of sulphur shall be included as part of the quota of the Consorzio; and the Consorzio guarantees that Italian producers and sellers of sulphur, other than the Consorzio will not export sulphur for acid making at a reduced price.

Division of tonnage.—Subject to the conditions and agreements below set forth, the world's sulphur market excluding:

- (1) The Kingdom of Italy, its dependencies and its colonial possessions and
- (2) North America, Cuba, the islands off the coast of Canada and the insular possessions of the United States of America

shall be apportioned on the basis of allowing the Export Corporation 75%, and the Consorzio 25% of annual invoiced sales, including therein all exports of manufactured sulphur from the United States and from the Kingdom of Italy to all countries covered by this agreement as above.

If, however, under such division the invoiced sales of the Consorzio in any one year do not reach 135,000 long tons of 2,240 lbs. each, then in such event, the Export Corporation will, from its portion, allocate to the Consorzio such tonnage as may be necessary to give the Consorzio a total of 135,000 long tons, for such year but in no case shall such additional tonnage so allocated exceed 45,000 long tons.

For the purpose only of determining quotas or tonnage, as above set forth, all exports of manufactured sulphur from the United States and from the Kingdom of Italy to all countries covered by this agreement as above shall also be included.

In making current determinations of allocation the exports of manufactured sulphur from the Kingdom of Italy shall first be deducted from the share of the Consorzio and similarly the exports of manufactured sulphur from the United States shall first be deducted from the share of the Export Corporation.

If the total invoiced sales of American sulphur in the Dominion of Canada shall exceed 75,000 long tons per year, then, in such event, the Export Corporation will, from its portion, allocate to the Consorzio additional tonnage equal to 25% of such excess.

For example, assuming the total amount of invoiced sales of crude sulphur plus exports of manufactured sulphur for one year under this agreement is 360,000 tons, of which amount 60,000 tons is manufactured sulphur, exported from the Kingdom of Italy, and 5,000 tons is manufactured sulphur exported from the United States, the Consorzio's proportion of the total of 360,000 tons being 25% or 90,000 tons, plus the guaranteed amount necessary to make up 135,000 tons, that is to say in this case 45,000 tons, and the Export Corporation's proportion of the total being therefore 225,000 tons, there shall be deducted from the Consorzio's quota of 135,000 tons the amount of manufactured sulphur exported from the Kingdom of Italy, to wit 60,000 tons, leaving a balance of 75,000 tons of crude sulphur to be sold by the Consorzio; there shall likewise be deducted from the Export Corporation's quota of 225,000 tons the amount of manufactured sulphur exported from the United States, to wit 5,000 tons, leaving a balance of 220,000 tons of crude sulphur to be sold by the Export Corporation; making a total of 295,000 tons of crude sulphur to be sold by the parties jointly, the percentage of the Consorzio being approximately 25.423% and the percentage of the Export Corporation being approximately 74.577%.

For further example, assuming that the total sales for one year are in excess of 540,000 tons, say 600,000 tons, 25% gives the Consorzio 150,000 tons, or more than 135,000 tons in which cases the guarantee of additional tonnage to the Consorzio does not apply, and assuming the same figures for manufactured sulphur as in the preceding example, then the amount of crude sulphur to be sold by the Consorzio would be 90,000 tons and the amount of crude sulphur to be sold by the Export Corporation would be 445,000 tons, the percentages being approximately 16.82% for the Consorzio and approximately 83.18% for the Export Corporation.

It is understood that should additional tonnage be due to the Consorzio by reason of invoiced sales of American crude sulphur in the Dominion of Canada being in excess of 75,000 tons per annum, such additional tonnage should be added to the Consorzio's quota as figured above.

Sulphur for acid making.—The privilege is accorded to the Consorzio to sell additional tonnage solely for the manufacture of sulphuric acid, at a reduced price. Such additional tonnage shall be sold in such manner as not to interfere with the normal market for sulphur. In no case shall such sales exceed 65,000 long tons per annum without the express approval of the Export Corporation.

Any shipments or deliveries made on or after October 4, 1922, on account of tonnage contracted for by the Consorzio with English acid makers previous to such date shall be included in computations under this article.

Sales made under this article shall not be considered as being included in the world's crude sulphur market as covered by this agreement nor shall such sales be included in determining quotas under this agreement.

Effective date.—The effective date of this agreement is October 4, 1922. The first year under this contract shall begin on such date and shall end September 30, 1923; all succeeding years shall begin with October 1 and end with September 30. All shipments and/or deliveries made on and after October 4, 1922, either from stock in warehouse or otherwise, shall be included in the computation of tonnage and quotas.

Price.—The prices, terms, and conditions of sale of all sulphur sold under this agreement shall be fixed from time to time by the parties in such manner as best to serve their mutual interest.

Allocation.—The allocation or distribution of tonnage sold under this agreement shall be fixed from time to time in such manner as may afford each party the advantages of freight rates and market conditions arising by reason of geographical location with regard to the market served, insofar as this may be done without prejudice to the other party; but each party shall be entitled to its proportionate share of crude sulphur under this agreement of any market upon request to the other; and each party shall be obligated to take its said proportionate share in any low-priced market upon request of the other.

In order to effectuate this purpose and to facilitate the operations to the mutual and best interests of both parties, they shall each appoint an assistant executive representative, resident in Europe who shall constitute a central bureau for the exchange of data and compilation of statistics and shall assist in the allocation and distribution of tonnage and have such other functions as shall from time to time be assigned them by the parties for the furtherance of the purposes of the agreement. Each party shall promptly furnish to the Central Bureau copies of all contracts and invoices made by it and a note of shipments to warehouses and shipments of manufactured sulphur in the business covered by this agreement. Where in competitive markets the actions of the agents of the respective parties may become detrimental to the best interests of either of the parties hereto all the business under this agreement shall be transacted through the Central Bureau for such time as may by the parties be decided upon as proper.

Adjustments of tonnage and of sales shall be made for the period ending March 31, 1923, and for each successive period of six months. If at the termination of any such six-month period it is determined that either party has not sold its full quota as provided herein, or that adjustments in distribution and allocation of tonnage are necessary, such deficiency and necessary adjustments shall be made up within the next succeeding six-month period.

If at any time this agreement shall come to an end the final adjustment shall be made in cash at the average price f. o. b. the respective shipping ports for the period to which the adjustment refers, realized under this contract by the party to whom the cash is to be paid. The party to whom the cash shall be paid will hold the corresponding tonnage of sulphur at the disposal of the other party for six months free of any charge including insurance, and will deliver it f. o. b. the respective shipping ports at the other party's request. This tonnage of sulphur shall not be sold in the territories excluded from the world's crude sulphur market as defined under this agreement.

Statistical.—On or before the thirtieth of each month each party shall furnish to the other, and to the Central Bureau, a statement covering the operations of the preceding calendar month which shall show the total tonnage shipped, total tonnage sold and total tonnage delivered, destinations, prices realized, both f. a. s. and/or f. o. b. and/or c. i. f. and/or c. f.; freight rates paid, and such other information as may be from time to time necessary for proper forecast and allocation.

Penalty for violations.—In case either party shall directly or indirectly export any sulphur or permit the export of any sulphur to the territories covered by this agreement otherwise than as herein provided, for each ton so exported there shall be a reduction in such offending party's allocation provided for herein of two tons and an increase in the allotment of the other party of two tons.

Manufactured sulphur.—It is judgment of both parties that the situation of the sulphur manufacturing industry in the countries covered by this agreement should be maintained as it at present exists throughout the life of this agreement; each party agrees not to do or encourage anything which would result in altering such present situation and any action of a nature to alter such present situation shall be jointly considered and both parties shall use their best endeavors to prevent any such alteration.

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PORT CORPORATION,
SNIDER, *President*.

LBRETH, *Secretary*.

SOLFIFERA SICILIANA,

LOBRETAIGNE,
Secretary.

APRIL 15, 1939.
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CHEMICALS, N.E.C.
CANNED & DRIED
BOOTS & SHOES
MEN'S, YOUTHS' &
KNIT GOODS
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LUMBER & TIMBER
BUTTER
RUBBER TIRES &
FURNITURE, INC.
LIQUORS, MALT
MACHINE SHOPS
PAINTS, PIGMENT
NONFERROUS ME
SUGAR REFINING
BLAST FURNACE
RAILROAD REPAIR
SMELTING & REFIN
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LEATHER, TANNING
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TIN, CANS, N.E.C.
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SOAP
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REFRIGERATORS
DYING & FINISH
FOOD PREPARAT
SHORTENINGS, ET
ICE CREAM
STAMPED & PREP

Under the circumstances we think it would be fairer to all concerned to have a complete and exact copy of the agreement for the record. I am therefore asking that you furnish me with such a copy.

Will you also kindly advise the exact date when it was terminated and the circumstances of its termination.

Very truly yours,

WM. T. CHANTLAND, *Attorney.*

WTC:mk

Cable Address UNISULPCO

THE UNION SULPHUR COMPANY

General Offices—Frasch Building, 33 Rector Street

Office of the President

New York, April 20, 1939.

FEDERAL TRADE COMMISSION,
Washington, D. C.

GENTLEMEN: Receipt is acknowledged of your letter dated the 15th instant written over the signature of Mr. Wm. T. Chantland, Attorney, requesting certain information in connection with the "Investigation of Business Conditions by the Temporary National Economic Committee."

The writer has had made a limited search of the old records of the Company still open covering the year 1907. This does not disclose any record of an agreement between this company and any Sicilian company.

There is only one member of the executive organization of 1907 still with our company. He does not recall any agreement of that period with a Sicilian company. It would appear, however, that whatever world sulphur market understanding existed subsequent to 1907 and prior to 1913 was between a German agency company and the Consorzio Obbligatorio per Industrie Solifera Siciliana, an Italian government controlled group of Sicilian producers. This agency company was The Union Sulphur Company of Hamburg, Germany. Certain records found indicate that an agency agreement between The Union Sulphur Company of New Jersey and the Hamburg company terminated December 31, 1912.

If you decide the old history of our company's operations is of sufficient importance to warrant an exhaustive search of our records and formally demand same, we will have the stored files of that period opened and gone into systematically.

Yours very truly,

GEO. M. WELLS.

MAY 1, 1939.

Re Sulphur.

Mr. GEO. M. WELLS,

*The Union Sulphur Company,
Frasch Building, 33 Rector Street, New York, New York.*

DEAR MR. WELLS: This is in acknowledgment and reply to your letter of April 20 in reply to mine of the 15th of April.

In an attempt to avoid troubling your company further in the matter inquired about, I have had a representative of the Commission make a very thorough search here for the desired information, but with no success.

Therefore, without at this time using the formality of a subpoena, I am asking if you will kindly cause to be made search, within reason, to locate (1) your contract of 1907 with the Hamburg Company, and (2) its contract with the Sicilian Company of that date. If these are located, will you then state, preferably by documents, the time and circumstances of the termination of these contracts.

Very truly yours,

WM. T. CHANTLAND, *Attorney.*

WTC/bso

Cable Address UNISULPCO

THE UNION SULPHUR COMPANY

General Offices—Frasch Building, 33 Rector Street

Office of the President

NEW YORK, May 3, 1939

FEDERAL TRADE COMMISSION,
Washington, D. C.

(Attention Mr. Wm. T. Chantland, attorney.)

DEAR SIR: Receipt is acknowledged of your letter of May 1st in reply to ours of April 20th.

It is noted that you insist on the search of our old files being made for the documents referred to in your letter of April 15th.

Accordingly orders have been issued to have the old executive files opened and the necessary search made.

Yours very truly,

GEO. M. WELLS.

Cable address UNISULPCO

THE UNION SULPHUR COMPANY

General Offices—Frasch Building, 33 Rector Street

Office of the President

NEW YORK, May 11, 1939.

FEDERAL TRADE COMMISSION,
Washington, D. C.

(Attention Mr. Wm. T. Chantland, Attorney.)

DEAR SIR: In accordance with our letter of May 3rd acknowledging your letter of May 1st requesting that a search be made of our files for certain contracts of 1907 between The Union Sulphur Company or its subsidiary, and the Sicilian sulphur producers, we have to advise that this search has been completed and we are now enclosing photostatic copies of the following:

1. Translation from the German-Italian of a preliminary agreement between Herman Hoechel, Manager of The Union Sulphur Company, m. b. H., Hamburg and Pietro Lauro, General Manager of the Consorzio Obbligatorio for the Sicilian sulphur industry, dated November 23, 1907.

2. Translation from the German-Italian of a final agreement between Herman Hoechel, Manager of The Union Sulphur Company, m. b. H., Hamburg and Pietro Lauro, General Manager of the Consorzio Obbligatorio for the Sicilian sulphur industry, dated February 29, 1908.

3. Western Union cablegram dated January 20th, 1913, from Herman Frasch to Squatriti, Conzolfo, Palermo, cancelling the agreement referred to immediately above.

4. Translation of a cablegram sent by Herman Frasch to Herman Hoechel on January 21, 1913, quoting his (Frasch) cablegram of the previous day and stating reasons to Hoechel for cancellation.

We have been unable to find a formal contract between The Union Sulphur Company of New Jersey and its agency company, Union Sulphur Company, m. b. H., Hamburg. In view of the two cablegrams it would be indicated that Mr. Frasch considered the market agreement between the Hamburg company and the Consorzio to all intents and purposes with The Union Sulphur Company of New Jersey. At that time Mr. Frasch was President of both the Union Sulphur Companies.

Yours very truly,

GEO. M. WELLS.

[Translation from German]

(Nov. 23, 1907.)

Messrs.

Hermann Höchel, in his character as Manager of the Union Sulphur Company m. b. H. (Private Limited Company), who, in the name and interests of the said Company, and for the execution of this agreement, elects domicile in Hamburg; and

Pietro Lauro, General Manager of the Consorzio obbligatorio per l'industria solfifera siciliana, residing in Palermo, with the intention of making possible an agreement between the respective corporations represented by them, for the main purpose of securing a larger increase in the consumption of sulfur, have reached this preliminary agreement today, which is to be changed into a regular contract as soon as the conditions have been agreed upon, which, pursuant to these presents, are to be subjected to later examination.

Article 1.—When the yearly sales of sulfur (Fuso) in all markets are below 600,000 tons, $\frac{1}{2}$ of the quantity sold will be supplied from the Louisiana production and $\frac{1}{2}$ from the Sicilian production.

Article 2.—When the yearly sales in sulfur in all markets have reached 600,000 tons, the quantity of 400,000 tons will be supplied from the Sicilian production and the quantity of 200,000 tons from the Louisiana production.

Article 3.—When the yearly sales exceed 600,000 tons and reach up to 640,000 tons, in such case the quantity of 400,000 tons will be supplied from the Sicilian production and the balance up to 240,000 tons from the Louisiana production.

Article 4.—When the yearly sales exceed the quantity of 640,000 tons, the surplus to the extent of 70% will be supplied from the Louisiana production and to the extent of 30% from the Sicilian production.

Article 5.—As soon as it has been possible for the Union Sulphur Company, pursuant to the provisions of the foregoing articles, to supply a quantity equivalent to that supplied by the Sicilian Consorzio during the same yearly period, the further additional quantity shall be supplied, to the extent of one half, by each of the two parties.

Article 6.—For the determination of the quantities in accordance with the foregoing articles, it is herewith stipulated that the fiscal year shall run from August 1st until July 31st of each year.

For the current year, which, for the purpose of the aforementioned stipulation, shall run as from the date of this agreement, there shall be accounted, respectively, the quantities which each one of the contracting parties must supply from today until July 31, 1908, and in this way the deliveries following this date shall be applied against the years corresponding to the deliveries themselves.

For the fiscal year running from today until July 31, 1908, it is agreed that the quota of each of the two contracting parties shall be equivalent to $\frac{8}{12}$ of the quantities stipulated in Articles 1 to 5 of this agreement.

It is also agreed that in the event that during one or several fiscal years the quantities allotted to each contracting party should be exceeded by the sales made by such party, the excess over the quota shall be charged against the following fiscal year or years.

For the performance of the foregoing, the contracting parties agree to advise each other up to the 15th of December next, of the total amount, itemized per month, of the sulfur sold up to today for future delivery and they respectively agree to submit to each other, upon request of the other contracting party, the contracts in question.

They also agree to advise each other, in monthly periods, of the total quantity of the sales made for prompt and later deliveries.

Article 7.—For sales of sulfur for the replacement of pyrites and for other industrial purposes which, as in the case of sulfuric acid, require a raw material at a low price, it is agreed to proceed jointly, and that the quantity of up to 100,000 tons of sulfur is to be supplied by the Sicilian Consorzio, while the quantity above same is to be supplied by both parties share and share alike.

The sales of sulfur for the applications contemplated in this article, shall not be governed by Articles 1 to 5 of this agreement.

Article 8.—The sales prices for all markets shall be stipulated in advance by both parties.

However, in order to facilitate the course of business, it is stipulated that up to a later agreement the present agreement shall be restricted to the markets of the U. S. A. and of Canada, and that, as far as other markets are concerned in case of unimportant price changes, it shall be sufficient that the Sicilian Consorzio advise the Union Sulphur Company of any change in its price list.

It is agreed that the sulfur required for Italy is to be supplied exclusively by the Sicilian Consorzio, at such prices as the latter may deem advisable.

Article 9.—An advertising office is to be organized as quickly as possible for joint working and joint expense for developing the use of sulfur in agriculture and all other industries.

The plan for the arrangement to be adopted for the next campaign shall be agreed upon by and between the parties.

Article 10—Mr. Lauro and Mr. Höchel, in their respective characters, agree that a new conference is to be held between them within 3 months for the purpose of stipulating the final contract, in which contract also stipulations are to be adopted concerning the following questions which are reserved:

(a) Control of the quantities sold by each contracting party and this for the purpose of the correct performance of Articles 1 to 5 of this agreement.

(b) Penalties to be agreed upon in the event that either of the parties should sell, without a declaration to this effect, a larger quantity than reserved for it in this agreement, or in the event that it should make sales at a lower price than the price agreed upon.

(c) Expiration of the present agreement.

Article 11.—The parties agree to keep the terms of this agreement strictly confidential.

Article 12.—Any differences of opinion or disputes which might arise in connection with the fixing of the prices and in connection with the performance of any stipulation of this agreement and with regard to the questions reserved in accordance with Article 10, shall be submitted to the decision of an amicable arbitrator. This amicable arbitrator is forthwith appointed in the person of His Excellency the Marquis Antonio Starrabba di Rudini, member of the Italian Parliament, whose decision shall be final and whose award shall be considered by both parties as having the force of a court decision.

In the event that it should not be possible to perform this agreement, the decision as to liquidation shall be entrusted to the abovementioned arbitrator as amicable arbitrator.

All advices or communications which the parties have to exchange with each other in order to obtain the decision of the abovementioned amicable arbitrator and the subsequent communications either of the parties or of the arbitrator must be sent by registered letter return receipt requested, to Palermo for the Consorzio, to Hamburg for the Union Sulphur Company and to his domicile in Rome for the arbitrator.

Three identical copies of this agreement have been drawn up and signed, each contracting party receiving one copy, while the third copy is turned over to His Excellency the Minister for Agriculture, Industry and Commerce of the Kingdom of Italy.

ROME, NOVEMBER 23, 1907.

(Signed) HERMANN HÖCHEL.

(Signed) PIETRO LAURO.

NOTE

The signers of this agreement, as well as the arbitrator, beginning with the next meeting, and subsequently, have the right to suggest modifications or amendments which might arise on basis of past experience or possible difficulties.

(Signed) H. H.

(Signed) P. LAURO.

[Translation from: German B-GS]

(FEB. 29, 1908.)

CONTRACT

This private agreement, which shall be considered as a public instrument, was entered into by and between the following parties:

1. Mr. Hermann Hoechel, of Hamburg, temporarily residing in Rome, in his character as Manager of the Union Sulphur Company m. b. H. (Private Limited Company), with registered office in Hamburg, who stated that he is vested with the necessary powers, in accordance with the provisions of the law and in accordance with the Statutes (Translator's Note: The Statutes are approximately equivalent to the combined Articles of Incorporation and By-Laws) of the said Company, to execute the following agreement, as appears from the annex hereto.

2. Knight Pietro Lauro, residing in Palermo, temporarily sojourning in Rome, in his character as General Manager of the Consorzio Obbligatorio per l'Industria Solifera Siciliana, organized in accordance with the provisions of the Law of July 15, 1906, No. 333, with registered office in Palermo, who executes this agreement pursuant to the powers (power of attorney) granted to him by the Board of Directors of the Consorzio by resolution dated February 17/19, 1908, a transcript of which is attached to this agreement as item * * *;

Whereas Knight Lauro and Mr. Hermann Hoechel, in their respective characters, have entered into a special agreement under date of November 23, 1907, mainly for the purpose of enlarging the sulphur market and whereas the parties have agreed to convert the aforementioned agreement within three months from the date of the latter into a regular contract;

Whereas the contracting parties intend to execute by these presents the aforementioned final contract after they have come to an agreement as to the manner in which certain relations are to be regulated which, in the said agreement, were expressly reserved for later consideration:

Confirming and partly modifying the provisions contained in the aforementioned agreement, previously entered into between the parties, *the following is herewith agreed upon and stipulated:*

Article 1.—The parties, each as far as it is concerned, herewith confirm the foregoing recital which, for this purpose is made an integral part of this contract;

Article 2.—If the total quantity of melted sulphur which is sold and delivered annually by the Sicilian Consorzio and by the Union Sulphur Company m. b. H. in all markets does not exceed a total of the two companies of 600,000 tons, then $\frac{2}{3}$ of the total of the Sicilian production and $\frac{1}{3}$ of the Louisiana production shall be delivered.

If, however, at the end of a fiscal year, it should be found that the proportional quota in the total amount of the sales and deliveries of melted sulphur by the parties, reserved for the Sicilian Consorzio pursuant to the foregoing paragraph, does not reach the quantity of 400,000 tons, then it will be optional with the Union Sulphur Company m. b. H. upon a corresponding request of the Sicilian Consorzio, to assign to the latter, against its own quota, the quantity required by the Consorzio in order to complete the 400,000 tons and in this case, the Consorzio must compensate the Union Sulphur Company m. b. H. with the like quantity in the manner that it, in turn, (in the year or years immediately following, whenever this is possible, and up to the corresponding quantity) assigns the quota to which the Consorzio is entitled, against the quantities exceeding the 640,000 tons in accordance with the provisions of the following Article 4:

In the event that the Union Sulphur Company m. b. H. should refuse to exercise this right (option) or in the event that it should actually not exercise it, then the Sicilian Consorzio will, in turn, have the right to declare this contract as cancelled, and this cancellation shall enter into force automatically between the parties as from the 30th day after the receipt by the Union Sulphur Company m. b. H. of a declaration made along these lines by the Consorzio.

For the purpose of the possible application of the provisions contained in the two foregoing paragraphs in connection with the fiscal year terminating on July 31, 1908, the parties take due note of the declaration made by Mr. Lauro, in his aforementioned character, namely that the quantity of sulphur sold up to the present time by the Sicilian Consorzio for delivery up to July 31, 1908, amounts to about 350,000 tons.

Article 3.—If the quantity of the sulphur sold and delivered annually by the two entities, as explained above, attains a total of more than 600,000 tons, but not more than 640,000 tons, then in such event, the quantity of 400,000 tons shall be delivered from the Sicilian production and the remaining quantity up to 240,000 tons from the Louisiana production.

Article 4.—If the total quantity of the yearly sales and deliveries, as stipulated above, should exceed the grand total of 640,000 tons, then 70% of the excess shall be supplied from the Louisiana production and 30% from the Sicilian production.

Article 5.—If by the application of the provisions contained in the foregoing Article 4, the Union Sulphur m. b. H. should have reached a quantity of sales and deliveries which is equivalent to the quantity supplied by the Sicilian Consorzio during the same period, then the further quantities shall be supplied to the extent of $\frac{1}{2}$ each by each of the parties.

Article 6.—For the purposes and effects of the stipulations contained in the foregoing Articles 2 to 5 of this contract, the following is agreed upon:

(a) That the fiscal year shall run from August 1st to July 31st of each year.

(b) That the quantities sold in one fiscal year, for deliveries in one or several following future fiscal years, shall be accounted against the quota of the latter and that for the current fiscal year, which is figured from the date of the agreement of November 23, 1907, each one of the parties will set off the quantities delivered from that time on and the quantities to be delivered up to July 31, 1908, regardless of the time when the sales were made while the deliveries, which may take place

at later dates, shall be computed regularly against the quota of the years corresponding to the deliveries themselves.

(c) That for the current fiscal year terminating on July 31, 1908, the quota of each party shall be on basis of $\frac{1}{12}$ of the quantities reserved for it in accordance with the stipulations of the foregoing Articles 2 to 5.

(d) That in order to regulate the respective quotas, the parties shall advise each other regularly once a month of the total quantity (classified in accordance with the months) sold by them for immediate or later delivery and of the quantities actually delivered. On December 31st and July 31st of each fiscal year, the parties shall advise each other furthermore with regard to the quantities of sulphur which constitute the reserves or stocks held by each party.

(e) That the contracting parties, by suitable initiative (measures), either by the assignment of contracts, if this is possible, or by any other suitable means, shall endeavor, on basis of mutual obligations, in accordance with the foregoing item (d), to balance periodically between each other the sales and deliveries of sulphur in the manner that in connection with the sulphur sold and delivered by them respectively within each individual fiscal year, those ratios shall be maintained in the best possible manner which were allotted to the parties in accordance with Articles 2 to 5 of this contract.

(f) That if at the close of any fiscal year it should be found that the quantities sold and delivered by one of the parties should exceed the proportion which has been stipulated for it for each individual case in Articles 2 to 5 of this contract, the quantity exceeding the said ratio shall be charged against the quotas (quantities) of the fiscal year immediately following.

(g) That the quantities exceeding the said ratio, which one of the parties may sell and deliver during the last fiscal year, shall be balanced and compensated between the parties within the six months following the expiration of this contract, either by assignment of contracts or in any other suitable and equitable form.

Article 7.—With regard to the sales prices, the following is stipulated by and between the parties:

(a) That they must be stipulated jointly between the parties, in the manner that the prices of the Sicil. Secunda Vantaggiata and of the Ia Louisiana are approximately the same, and that in no event shall the difference between them be greater than $2\frac{1}{2}\%$.

(b) That the prices for the inferior Sicilian qualities shall be quoted by the Consorzio in accordance with their content.

(c) That the price of the Sicil. Secunda Vantaggiata cannot be fixed at a lower sum than 95 Gold Lire per ton placed on board sail vessel in Sicily and the price for Ia Louisiana at a lower amount than \$22 gold per ton c.i.f., New York.

(d) That under due consideration of what has been stated above, neither the Sicilian Consorzio on the markets of the United States (with the exception of California) and Canada, nor the Union Sulphur Company m. b. H. in the European markets can sell at lower prices than the prices fixed within the above-mentioned limits by the Sicil. Consorzio for the European markets and by the Union Sulphur Company m. b. H. for the markets of the United States (with the exception of California) and Canada.

For the markets of California and Australia, however, also lower prices than those stipulated above can be fixed by common agreement.

(e) That if any new factor should disturb the normal sulphur market, and if it should be found necessary to reduce the prices, such a price reduction shall only be made by common agreement, and that in the event that the parties should not be able to come to an agreement, the provisions of the compromise clause appearing further below shall be applied.

(f) That the sulphur required for consumption in Italy shall be delivered exclusively by the Sicil. Consorzio at the prices which it may deem advisable to apply, in connection with which the Consorzio guarantees, in accordance with the penalty clause set forth below, that the sulphur which may have been sold by it at a lower price for consumption in Italy shall not subsequently be exported.

Article 8.—For sales in any markets of sulphur ore or melted sulphur or of sulphur in any form as substitute for pyrites for industrial purposes, which require, as for instance sulphuric acid, a raw material at reduced prices, it is agreed that for the first 100,000 tons to be supplied after the signing of this contract, the Sicil. production shall be given the preference, while the remaining quantities are to be supplied: one-half by the Sicil. Consorzio and the other half by the Union Sulphur Company m. b. H.

However, upon the request of the Sicil. Consorzio, the parties must examine into the question and unanimously agree—and in cases of non-agreement, the arbitrator in accordance with Article 12 must decide—whether circumstances or conditions apply on account of which, after the delivery of the first 100,000 tons, there must be allotted to the Sicil. Consorzio for a further period of time a larger percentage than the aforementioned one-half.

It is agreed that to such purchases there shall be applied the rules and regulations stipulated in the foregoing articles if and insofar as they are applicable and that all pertinent negotiations in Europe shall be carried out exclusively by the Sicilian Consorzio and in the United States (America) by the Union Sulphur Company m. b. H., excluding any direct and indirect interference of the other party in connection with offers, negotiations or sales to third parties, of the said sulfur and minerals and subject to the reservation of mutual control as follows:

For the purpose of what has been stated above, the Sicilian Consorzio and also the Union Sulphur Company m. b. H. hold themselves responsible for the correct observation, also on the part of third parties (purchasers) of the destination of the said sulfur and ores for the abovementioned industrial purposes and in the event that it should be found that the abovementioned provisions are exceeded, then in such event there will be charged automatically against the party making such deliveries against the quota reserved for it in the provisions of Articles 2 to 5, a quantity equivalent to 10 times the quantity which was the subject matter of the excess ascertained.

The parties agree to advise each other every month of the quantity sold of melted sulfur and sulfur ore for the aforementioned purposes and also to state the quantities supplied for such purposes stating at the same time the name of the purchasers and the place of destination of the factories or plants.

The parties finally agree most specifically to sell melted sulfur and sulfur ore for the purposes mentioned, only directly to the consumers.

Article 9.—The parties agree to install in Rome, Hamburg, and other suitable places of Europe advertising offices in due time so that they can operate for the campaign of the current year in order to increase the consumption of sulfur for agriculture and also for other industries. The expenses must not exceed the quota of 0.50 Lire for every ton of sulfur sold in accordance with the provisions of Articles 2 to 5 of this Contract and such expenses shall be divided half and half between the parties.

It is furthermore stipulated that it shall be tried to induce the sulfur refiners to contribute to these expenses.

The parties finally agree to examine, as quickly as possible and by means of suitable offices, into the organization of the joint sale of the sulfur produced by them on all markets and to take the necessary steps in this connection.

Article 10.—The parties agree to subject each other to a mutual control which is to be exercised by each party on the other party through persons especially delegated for this purpose. The parties are authorized to reject those delegates who could take advantage of their office for their own business and they furthermore agree to facilitate for the delegates the performance of their mission in every possible manner.

If an infringement by any of the parties of the provisions of this contract should be ascertained, either in the manner that such party has quoted lower prices than those stipulated in Article 7, or that it has given advice of sales, stating smaller quantities sold than the actual quantities, or that it has given information in an untruthful manner with regard to the prices and dates as to the quantities of sulfur and ores sold and delivered and as to the respective kinds or grades, or on account of the nonobservance of the guarantee stipulated in Art. 7, letter f, or of the non-observance of the provisions of Art. 8, last paragraph, of this agreement, then, and in such event, it is stipulated that for each such infringement the party responsible therefor shall be charged, against the quota reserved for it, with a quantity which shall be equal to ten times the quantity in connection with which the infringement ascertained has occurred, if possible, against the current fiscal year or otherwise against the immediately following fiscal year.

Article 11.—This contract shall be in force for the entire duration granted to the Consortium by the law of July 15, 1906, No. 333.

Article 12.—Any dispute arising from this agreement shall be submitted to the decision of the Marquis Antonio Starrabba di Rudini, whose award shall be final, and, who, for this purpose, has been vested with the power and authority of an amicable arbitrator. In the event, however, that the Marquis di Rudini for any reason whatsoever should refuse to act as such or if he actually should not accept the office of arbitrator, then the dispute in question shall be submitted to the decision of three arbitrators whose decision shall also be final and who shall act

as amicable arbitrators; each of the parties shall appoint one arbitrator while the third arbitrator or umpire shall be appointed in agreement with the two arbitrators appointed by the parties. Should the two arbitrators not agree, then the umpire, in connection with the organization of the first Board, shall be appointed by the Presiding Justice of the Court of Cassation in Rome, and, in case of the organization of the second Board, by the Presiding Justice of the Court of Appeals of Hamburg and so on, in connection with the organization of any further Board; the appointment shall be made alternately by either of the two aforementioned Presiding Justices.

The parties agree, each insofar as it is concerned, to keep this agreement confidential, which agreement will be signed in triplicate, each of the parties receiving one copy, while the third copy is to be deposited with the Italian Minister for Agriculture, Industry and Trade.

ROME, FEBRUARY 29, 1908.

(Signed) PIETRO LAURO.
HERMANN HÖCHEL.

REMARKS TO THE CONTRACT

Annexes to Page 1.—The Annex concerning Mr. Höchel consists of a transcript from the Mercantile Register of Hamburg and is attached to the contract which is in Mr. Lauro's possession.

Mr. Lauro has promised to send a transcript from the minutes of the resolutions of the Board of Directors from Palermo.

Re Article 2.—The wording of the so-called Guarantee-Clause for the 400,000 tons leaves it to our discretion as to whether or not we should grant to the Consortium the possible, necessary addition to the 400,000 tons, and, in particular, Boschi-Hüber attaches the greatest importance to this wording and is of the opinion that on account of this text we were always able to continue the contract or not.

With regard to the current year, I myself had rejected most energetically this conditional guarantee, explaining that we were absolutely unable to give any guarantee for the past, but Lauro declared, in the presence of Cocco Ortu, Luzzatti, Rudini and Boschi-Hüber, that he was bound by the power of attorney of his Board of Directors to demand this guarantee but that this guarantee was of no importance for the reason that he had already sold 385,000 tons and that he was absolutely sure that he would sell not only 400,000 tons, but more.

Thereupon I dropped my request. Lauro, however, was not so sure about his case and telegraphed to Palermo, from where he received the answer that for delivery up to July 31, 1908, only about 350,000 tons had been sold. Lauro alleged, however, that he was still absolutely sure that he would be able to sell more than 400,000 tons by the end of July.

I was not able to arrange for a new meeting after the previous meeting had brought about a definite agreement; however, I have expressed to Lauro and to each one of the four above-mentioned gentlemen my respective protests so that each one knows that, in the event the Consortium should not reach the 400,000 tons, we are not under the obligation to make up the quantity.

In accordance with the telegram from Palermo, there were actually delivered up to February (always figured from August 1, 1907) 206,000 tons and against the delivery up to July 31st there had already been sold 144,000 tons—350,000 tons.

In connection with Article 6 d, it was added that twice a year also the stocks on hand must be communicated.

I want to repeat here that Lauro stated that the Sicilian stock on December 31st was not higher than 450,000 tons.

Article 8.—For the time being, we will not be able to obtain the 100,000 tons for acid, for Lauro alleges that if he submitted to his Board such an application, the result would be a revolution, for it would then declare that we did not have enough sulphur and wanted to purchase sulphur at half its price from Sicily in order to thereupon sell it to other parties at double the price.

It is also stated that the Consortium has received an offer from Tunis for the entire stock and that the offer was made from a reliable source which could give all the necessary guarantees. Lauro will, in all probability, return to Palermo during the next few days and then call a meeting of its Board in order to submit a price to the party in Tunis.

In Tunis large phosphate stocks are located and, to all appearances, the sulphur is to be used for the manufacture of sulphuric acid and subsequently of superphosphates. However, I do not believe that this matter will actually be carried

out, for technical reasons, and for the reason that one cannot improvise sulphuric acid plants for a yearly consumption of 150,000 tons of crude sulphur (in accordance with Lauro, the party in question demanded such a quantity for yearly delivery).

In accordance with my opinion, on account of the necessary packing in bags and the higher weight, it would be unprofitable to convert the phosphates in Tunis into superphosphates and export same in this form.

However, I told the Sicilians that I wished they would have the best of success in connection with this transaction, as this would make the sulphur market extremely sound in an unbelievable manner.

Article 9—last paragraph.—This clause with regard to the joint sales was entered upon the motion of Rudini. He and Luzzatti are very much in favor of joint sales and it was stated that in connection with the coming amendment of the law an amendment is to be carefully introduced, which would make it possible for the Consortium to sell directly.

[Copy—Cable Message]

24 Paid \$7.44.
JAN. 20, 1913.

To: Squatriti Conzolfo, *Palermo*.

I hereby cancel and absolutely annul the contract between Hamburg Company and Consorcio Hoechel will wire you details tomorrow.

HERMAN FRASCH.

[Translation of cablegram sent to Mr. Hoechel]

NEW YORK, *January 21, 1913.*

I have telegraphed Squatriti as follows:

"I hereby cancel and absolutely annul the contract between The Union Sulphur Company, m. b. H., Hamburg and the Consorzio Obbligatorio. Mr. Hoechel will telegraph you details tomorrow."

Advise Squatriti I have taken this action on account of a law passed yesterday in the State of New Jersey, where we are incorporated. This law compels us to maintain a position absolutely free of any combination whatever.

(Signed by Herman Frasch.)

EXHIBIT No. 382

CERTIFICATE OF INCORPORATION, SULPHUR EXPORT CORPORATION

FIRST: The name of this corporation is SULPHUR EXPORT CORPORATION.

SECOND: The location of its principal office in the State of Delaware is No. 19-21 Dover Green, in the City of Dover, County of Kent. The name of its resident agent is The United States Corporation Company, and the address of said agent is No. 19-21 Dover Green, City of Dover, County of Kent, State of Delaware.

THIRD: The objects and purposes for which and for any of which this corporation is formed are, to do any or all of the things herein set forth to the same extent as natural persons might or could do, viz:

To engage solely in export trade as the term export trade is defined in the Act of Congress approved April 10, 1918, entitled, "An Act to Promote Export Trade and for Other Purposes," commonly known as the "Webb Act", namely, "trade or commerce in goods, wares, or merchandise exported or in the course of being exported from the United States or any Territory thereof to any foreign nation," and as defined in any and all Acts of Congress amendatory of or supplemental to said Webb Act, and, in connection with such trade, to do any and all things necessary and incidental thereto, including the following, provided that this corporation shall not have power to do any act or thing because of the doing of which it would be deemed to be engaging in business other than export trade as defined by the said Webb Act and any and all acts amendatory thereof or supplemental thereto.

To buy and sell sulphur for its own account and for account of others, for exportation, and to export the same, from the United States to all foreign countries, and incidental thereto to make advances on consignments of such merchandise, or to hypothecate the same.

To appoint agents and representatives in all parts of the world for the purpose of carrying on any and all of the objects of this corporation.

To enter into, make, perform, and carry out contracts and agreements of every kind incidental to such purpose, without limit as to amount or duration, with any person, firm, association, or corporation, private, public, or municipal, or any body politic;

To draw, make, accept, endorse, execute, and issue promissory notes, bills of exchange, warrants, and other negotiable or transferable instruments;

To borrow money and to issue bonds, debentures, or obligations of this corporation from time to time for any of the objects or purposes of the corporation, and to secure the same by mortgage, pledge, deed of trust, or otherwise.

To have one or more offices, to carry on any or all of its operations and business, and without restriction or limit as to amount to purchase or otherwise to acquire, hold, own, mortgage, sell, convey, or otherwise dispose of, real and personal property in any of the states, districts, territories, or colonies of the United States and in any and all foreign countries, subject to the laws of such state, territory, colony, or country.

To do any and all things necessary in order to realize the purposes herein set forth, and to have and to exercise all the powers conferred by the corporation laws of Delaware hereinafter referred to.

FOURTH: The authorized capital stock of this corporation is One hundred thousand dollars (\$100,000), divided into ten thousand (10,000) shares of the par value of ten dollars (\$10) each.

The amount of the capital stock with which this corporation will commence business is the sum of One thousand dollars (\$1,000), being one hundred (100) shares of the par value of ten dollars (\$10) each.

FIFTH: The name and place of residence of each of the original subscribers to the capital stock are as follows:

	<i>Number of shares</i>
C. H. Jarvis, Dover, Delaware.....	31
M. E. Scanlon, Dover, Delaware.....	31
M. F. Vance, Dover, Delaware.....	38

SIXTH: This corporation is to have perpetual existence.

SEVENTH: The private property of the stockholders shall not be subject to the payment of corporate debts to any extent whatever.

EIGHTH: Insofar as the same is not contrary to the laws of Delaware, no contract, act, or transaction of this corporation with any person or persons, firm or corporation, shall be affected or invalidated by the fact that any director or directors of this corporation is a party, or are parties to or interested in such contract, act, or transaction or in any way connected with such person or persons, firm or corporation, and each and every person who may become a director of this corporation is hereby relieved from any liability that might otherwise exist from contracting with the corporation for the benefit of himself or any firm, association, or corporation in which he may be in anywise interested. Directors so interested shall be counted when present at directors' meetings for the purpose of determining the existence of a quorum and may vote at such meetings as fully and with the same effect as if not so interested.

NINTH: At all elections of directors of this corporation each stockholder shall be entitled to as many votes as shall equal the number of his shares of stock multiplied by the number of directors to be elected and he may cast all of such votes for a single director or may distribute them among the number to be voted for, or any two or more of them as he may see fit.

TENTH: The board of directors is expressly authorized:

(1) To hold their meetings, to have one or more offices, and to keep the books of the company within or without the State of Delaware, at such places as may be from time to time fixed by the bylaws or designated by the board of directors; but the company shall always keep at its principal or registered office in Delaware the original or duplicate stock ledger, containing the names and addresses of stockholders, and the number of shares held by them respectively, which shall at all times during the usual hours of business be open for the examination of every stockholder.

(2) To make, alter, amend, modify, or rescind the bylaws of this company as provided therein; and to authorize and cause the execution and delivery of mortgages and liens upon the real and personal property of the company, provided, always, that a majority of the whole board concur therein.

(3) The board of directors, by the affirmative vote of a majority of the whole board, may appoint from the directors an executive committee of which a majority shall constitute a quorum; and, to such extent as shall be provided in the bylaws, such committee may have and exercise all or any of the powers of the board of directors including the power to cause the seal of the corporation to be affixed to all papers of the corporation that may require it.

(4) The board of directors may appoint not only other officers of the company, but also one or more vice presidents, one or more assistant treasurers, and one or more assistant secretaries, etc., and to the extent provided in the bylaws the persons so appointed shall have and may exercise such powers as shall be conferred or authorized by the bylaws.

ELEVENTH: Directors need not be stockholders.

WE, THE UNDERSIGNED, being each of the original subscribers to the capital stock hereinbefore named for the purpose of forming a corporation to do business both within and without the State of Delaware, and in pursuance of an act of the Legislature of the State of Delaware, entitled "An Act Providing a General Corporation Law" (approved March 10th, 1899) and the Acts amendatory thereof and supplemental thereto, do make and file this certificate, hereby declaring and certifying that the facts herein stated are true, and do respectively agree to take the number of shares of stock hereinbefore set forth, and accordingly have hereunto set our hands and seals, this 23rd day of October, A. D. 1922.

C. H. JARVIS	[L. S.]
M. E. SCANLON	[L. S.]
M. F. VANCE	[L. S.]

In presence of:
EDWIN F. WOOD
as to all

SULPHUR EXPORT CORPORATION

BYLAWS

ARTICLE I. OFFICES

SECTION 1. The principal office shall be at No. 19-21 Dover Green, in the City of Dover, County of Kent, State of Delaware, and the name of the agent in charge thereof shall be the United States Corporation Company..

SECTION 2. The corporation may also have offices at such other places as the board of directors may from time to time determine.

ARTICLE II

SECTION 1. The corporate seal shall have inscribed thereon the name of the corporation, the year of the organization, and the words "Corporate Seal, Delaware."

ARTICLE III. STOCKHOLDERS' MEETINGS

SECTION 1. All meetings of the stockholders shall be held at the principal office of the corporation or at such other place as may from time to time be designated by the Board of Directors, either within or without the State of Delaware.

SECTION 2. The annual meeting of stockholders shall be held on the first Tuesday of October in each year, if not a legal holiday, and if a legal holiday, then on the day following, at 11 o'clock A. M., for the election of directors, and the transaction of such other business as may come before the meeting.

SECTION 3. The holders of a majority of the stock issued and outstanding, present in person (or represented by proxy), shall be requisite to and shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by law, by the certificate of incorporation or by these bylaws. If, however, such majority shall not be present or represented at any meeting of the stockholders, the stockholders present in person (or by proxy) shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until the requisite amount of stock shall be present. At such adjourned meeting at which the requisite amount of stock shall be represented any business may be transacted which might have been transacted at the meeting as originally notified.

SECTION 4. At each meeting of the stockholders every stockholder shall be entitled to vote in person, or by proxy appointed by an instrument in writing

subscribed by such stockholder or by his duly authorized attorney and delivered to the inspectors of the meeting, and he shall have as many votes as shall equal the number of his shares of stock multiplied by the number of directors to be elected and he may cast all of such votes for a single director or may distribute them among the number to be voted for, or any two or more of them as he may see fit. No share of stock shall be voted on at any election of directors which has been transferred on the books of the corporation within twenty days next preceding such election. The vote for directors, and, upon the demand of any stockholder, the vote upon any question before the meeting, shall be by ballot. All elections of directors shall be had and all questions decided by a plurality vote except as otherwise provided by the laws of Delaware.

SECTION 5. Written notice of the annual meeting shall be mailed to each stockholder at such address as appears on the stock book of the corporation, at least ten days prior to the meeting.

SECTION 6. A full list of the stockholders entitled to vote at the ensuing election, arranged in alphabetical order, with the residence of each, and the number of shares held by each, shall be prepared by the secretary and filed in the office where the election is to be held, at least ten days before every election, and shall at all times, during the usual hours for business, be open to the examination of any stockholders.

SECTION 7. Special meetings of the stockholders, for any purpose or purposes, other than those regulated by statute, may be called by the president, and shall be called by the president or secretary at the request in writing of a majority of the board of directors, or at the request in writing by stockholders owning twenty-five percent in amount of the entire capital stock of the corporation issued and outstanding. Such request shall state the purpose or purposes of the proposed meeting.

SECTION 8. Written notice of a special meeting of stockholders, stating the time and place and object thereof, shall be mailed, postage prepaid, at least ten days before such meeting, to each stockholder at such address as appears on the books of the corporation.

ARTICLE IV. DIRECTORS

SECTION 1. The property and business of this corporation shall be managed by a board of directors composed of six (6) members, each of whom shall hold office until his successor shall have been elected and qualified.

SECTION 2. The directors may hold their meetings and have one or more offices, and keep the books of the corporation, except the original or duplicate stock ledger, outside of Delaware, at one of the offices of the corporation or at such other places as they may from time to time determine.

SECTION 3. In addition to the powers and authorities by these bylaws expressly conferred upon them, the board may exercise all such powers of the corporation and do all such lawful acts and things as are not by statute or by the certificate of incorporation or by these bylaws directed or required to be exercised or done by the stockholders.

SECTION 4. Regular meetings of the board may be held at such time and place as shall from time to time be determined by the board. At least one day's notice shall be given of such meetings.

SECTION 5. At all meetings of the board a majority of the directors in office shall be necessary and sufficient to constitute a quorum for the transaction of business, and the act of a majority of the directors present at any meeting at which there is a quorum, shall be the act of the board of directors, except as may be otherwise specifically provided by statute or by the certificate of incorporation or by these bylaws.

SECTION 6. Special meetings of the board may be called by the president on two days' notice to each director either personally or by mail or by telegram; and special meetings shall be called by the president or secretary in like manner and on like notice on the written request of two directors.

SECTION 7. The board of directors shall in accordance with the terms of a certain stockholders' agreement dated October 4, 1922 a copy of which is filed with this corporation and which is hereinafter called the Export Agreement, designate three (3) of their number, an executive committee, who may meet at stated times, or on notice to all by any of their own number. During the intervals between the meetings of the board, they shall advise with and aid the officers of the corporation in all matters concerning its interests and the management of its business, and generally perform such duties and exercise such powers as may be directed or delegated by the board of directors from time to time. The board

may delegate to such committee authority to exercise all the powers of the board, while the board is not in session. Vacancies in the membership of the committee shall be filled by the board of directors at a regular meeting or at a special meeting called for that purpose and in such manner that at all times a director, officer or other representative of each Exporter (as that term is defined in the said Export Agreement hereinbefore referred to) shall be a member of such committee. The executive committee shall keep regular minutes of its proceedings and report the same to the board when required.

SECTION 8. If the office of any one or more directors becomes vacant by reason of death, resignation, retirement, disqualification or otherwise, the directors then in office, by a majority vote at any regular or special meeting shall in accordance with the terms of the Export Agreement referred to in Article IV, Section of these Bylaws choose a successor or successors for the unexpired term in respect of which such vacancy occurred in such manner that at all times the directors, officers or other representatives of each Exporter (as that term is defined in said Export Agreement) shall at all times be members of the Board of Directors of this corporation.

ARTICLE V. OFFICERS

SECTION 1. The officers of the corporation shall be a President, a Vice President, a Secretary, and a Treasurer, all of whom shall be elected by the Board of Directors. The Secretary and Treasurer may be the same person, and the Vice President may also hold the office of Secretary or Treasurer.

SECTION 2. The Board of Directors, at its first meeting after each annual meeting of stockholders, shall elect from their own number, a President, and shall also choose a Vice President, a Secretary, and a Treasurer, who need not be members of the board. The President shall be elected only by the unanimous vote of the Board.

SECTION 3. The Board may appoint one or more Assistant Secretaries and one or more Assistant Treasurers and such other officers and agents as it shall deem necessary.

SECTION 4. All officers shall have the authority and perform such duties as usually appertain to their respective offices and shall from time to time be prescribed by the board.

SECTION 5. The salaries of all officers and agents of the corporation shall be fixed by the board of directors.

SECTION 6. The officers of the corporation shall hold office for one year and until their successors are chosen and qualify in their stead. Any officer elected or appointed by the board of directors may be removed at any time by the affirmative vote of a majority of the whole board of directors, except the president who shall only be removed by the unanimous vote or action of the executive committee or of the Board.

SECTION 7. The president shall be the chief executive officer; he shall preside at all meetings of the stockholders and directors; and shall see that all orders and resolutions of the board are carried into effect, subject, however, to the right of the directors to delegate any specific powers, except such as may be by statute exclusively conferred upon the president, to any other officer or officers of the corporation.

He shall execute bonds, mortgages, and other contracts requiring a seal, under the seal of the corporation, except when the board by resolution authorizes the execution of the same by some other officer or agent; he shall, when authorized by the board, affix the seal to any instrument requiring the same, and the same when so affixed shall be attested by the signature of the Secretary or Assistant Secretary, or of the Treasurer or Assistant Treasurer, or by such other officer or agent as may be designated by the board.

SECTION 8. The Vice President shall, in the absence or disability of the President, perform the duties and exercise the powers of the President, and perform such other duties and exercise such other powers as shall from time to time be prescribed by the board.

SECTION 9. The Secretary shall attend all sessions of the board and all meetings of the stockholders and act as clerk thereof, and record all votes and the minutes of all proceedings in a book to be kept for that purpose; and shall perform like duties for the standing committees when required. He shall give, or cause to be given, notice of all meetings of the stockholders and of the board of directors, and shall perform such other duties as may be prescribed by the Board of Directors or president, and under whose supervision he shall be. He shall keep in safe

custody the seal of the corporation. He shall be sworn to the faithful discharge of his duty.

SECTION 10. The Treasurer shall have, subject to the control of the Board of Directors, the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the corporation and shall deposit all moneys, and other valuable effects in the name and to the credit of the corporation, in such depositaries as may be designated by the Board of Directors.

He shall render to the President and directors, at the regular meetings of the board, or whenever they may require it, an account of all his transactions as treasurer and of the financial condition of the corporation.

He shall give the corporation a bond if required by the board of directors in a sum, and with one or more sureties satisfactory to the board, for the faithful discharge of the duties of his office. and for the restoration to the corporation, in case of his death, resignation, retirement, or removal from office, of all books, papers, vouchers, money, and other property of whatever kind in his possession or under his control belonging to the corporation.

SECTION 11. If the office of president becomes vacant by reason of death, resignation, retirement, disqualification, or otherwise, the directors then in office, by a unanimous vote shall in accordance with the terms of the Export Agreement referred to in Article IV, Section 7 of these By-Laws, choose a successor or successors who shall hold office for the unexpired term in respect of which such vacancy occurred.

SECTION 12. In the case of the absence of any officer of the corporation, or for any other reason that the board may deem sufficient, the board may delegate the powers or duties of such officer to any other officer, or to any director, for the time being, provided a majority of the entire board concur therein, except that in the case of the president the unanimous vote of the executive committee or of the Board of Directors shall be necessary.

ARTICLE VI. STOCK CERTIFICATES AND TRANSFER OF STOCK

SECTION 1. The certificate of stock of the corporation shall be signed by the president or a vice president and the treasurer or an assistant treasurer, or the secretary or an assistant secretary, and shall bear the corporate seal.

SECTION 2. Transfers of stock shall be made on the books of the corporation only by the person named in the certificate or by attorney, lawfully constituted in writing, and upon surrender of such certificate.

SECTION 3. The board of directors may close the transfer books in their discretion for a period not exceeding twenty days preceding any meeting, annual or special, of the stockholders, or the day appointed for the payment of a dividend.

ARTICLE VII

MISCELLANEOUS

SECTION 1. All checks, drafts, and notes of the corporation shall be signed by such officer or officers as the board of directors may from time to time designate.

SECTION 2. Whenever under the provisions of these bylaws notice is required to be given to any director, officer, or stockholder, it shall not be construed to mean personal notice, but such notice may be given in writing by depositing the same in the post office or letter box, in a post-paid sealed wrapper, addressed to such stockholder, officer, or director at such address as appears on the books of the corporation, or, in default of other address, to such director, officer, or stockholder at the General Post Office in the City of Dover, Delaware, and such notice shall be deemed to be given at the time when the same shall be thus mailed.

Any stockholder, director, or officer may waive any notice required to be given under these bylaws.

AMENDMENTS

SECTION 1. The stockholders, by the affirmative vote of a majority of the stock issued and outstanding, may at any regular, or at any special meeting, alter, amend, modify, or rescind these bylaws, or any one of them if notice thereof be contained in the notice of the meeting.

SECTION 2. The Board of Directors at any regular or special meeting by unanimous vote of all members of the Board or with their written consent may alter, amend, modify, or rescind these bylaws or any one of them.

SULPHUR EXPORT COMPANY AGREEMENT

THIS AGREEMENT, dated the 4th day of October 1922, made by and between THE UNION SULPHUR COMPANY, a corporation organized under the laws of the State of New Jersey, FREEPORT SULPHUR COMPANY, a corporation organized under the laws of the State of Texas and TEXAS GULF SULPHUR COMPANY, a corporation organized under the laws of the State of Texas (hereinafter called the "Exporters") WITNESSETH:

WHEREAS the Exporters are engaged in the mining, export, and sale of crude sulphur and desire to avail themselves of the benefits of the Act of Congress entitled "An Act to promote export trade, and for other purposes", approved April 10, 1918, commonly known as the "Webb Act," and to associate generally as far as they legally may for the sole purpose of promoting their export business (excepting, however, Canada, Newfoundland, and Cuba);

Now, THEREFORE, the Exporters severally agree each with the other as follows:

1. An association or corporation (hereinafter called the "Export Company") as the parties may hereafter agree shall be organized to effectuate the purposes hereinafter set forth. If a corporation it shall be organized under the laws of Delaware, with an authorized capital stock of One hundred thousand dollars (\$100,000), divided into ten thousand (10,000) common shares of the par value of Ten Dollars (\$10) per share, with a perpetual corporate life, and with such charter powers as will enable it to do an export business only and to effectuate the purposes of this agreement. Such corporation shall have no power to engage in any business in the United States and its territories except export trade as defined in said Webb Act, nor shall any provision of this agreement be deemed to relate to any business of the Exporters except their export trade as in said Act defined. The capital stock shall be subscribed for and taken by the Exporters severally (or by their nominees) in the amounts set opposite their respective names, as follows:

Name	Number of shares	Amount
Union Sulphur Company.....	3,750	\$37,500
Freeport Sulphur Company.....	3,125	31,250
Texas Gulf Sulphur Company.....	3,125	31,250

Payments shall be made on such subscriptions as and when called for in writing by or under the authority of the Board of Directors of the Export Company and stock of the Export Company issued for such subscription shall not be assignable or assigned by any of the respective parties during the pendency of this agreement.

2. The Board of Directors of the Export Company shall consist of six directors. At all times each exporter will have two nominees or representatives on such Board, one of whom will be the president or other managing officer of the several Exporters respectively.

There shall also be an executive committee, consisting of three directors who shall be the presidents or other managing officers of the several Exporters respectively. Proper provision shall be made to effectuate the above purposes in the certificate of incorporation or by-laws of the Export Company.

The president of the Export Company shall be chosen subject to the unanimous approval of and may be removed by the unanimous vote or action of the executive committee. Until his resignation, disability, death, or removal upon unanimous vote of the executive committee, the president of the Export Company shall be Clarence A. Snider, secretary and treasurer of The Union Sulphur Company, which offices or other employment with said Company he may still continue to hold. He shall have full authority and control over the business of the Export Company, subject to the control and approval of the Board of Directors or executive committee.

The Board of Directors shall have authority to provide such compensation for officers, heads of departments, and other employees of the Export Company as they may deem advisable and to make such provision for the conduct of the business of the Export Company by way of fixing prices to be received or paid for crude sulphur for export except to Canada, Newfoundland, or Cuba and the terms and conditions upon which it may be sold in accordance with the terms of this agreement, as to them may seem to the advantage of the Export Company.

3. The business of the Export Company shall be conducted substantially as follows, which following provisions are for the guidance of the Board of Directors and not a limitation on their powers:

3a. All exports of crude sulphur, except to Canada, Newfoundland, or Cuba for account of the Exporters, shall be made by the Export Company as in this agreement provided, and no Exporter shall directly, or indirectly, export any crude sulphur, nor assent, directly or indirectly, to the sale or disposition of any crude sulphur produced by it, for export, except in Canada, Newfoundland, or Cuba otherwise than through the Export Company.

3b. The president of the Export Company shall have full authority subject to the approval of the Board of Directors to select and appoint selling and distributing agents, in foreign countries covered by this agreement; such agents shall be paid such commissions for soliciting orders and attending to deliveries as may be agreed upon between them and the Export Company. The Export Company may, but it shall not be obligated to, take over any present existing contracts of agency or sales agreements for foreign countries covered by this agreement and any Exporter bound by any such contract or agreement not so taken over shall assume any and all liability thereunder and shall not make any shipments of crude sulphur under such contracts or agreements without the consent of the Export Company; and each of the Exporters severally will cease from soliciting orders for itself for crude sulphur individually or in its own name either directly or through agents in such foreign countries. It being understood, however, anything in this paragraph to the contrary notwithstanding, that this agreement is entered into subject to an arrangement to be made by each of the Exporters with their respective foreign agencies, for modification or cancellation of any existing contracts, which shall be arranged mutually agreeably to the Exporters, and in the event such mutual arrangement as to agents shall not have been reached within sixty (60) days then any Exporter shall have the right to terminate this agreement.

3c. All orders received by any Exporter, whether directly from buyers or through any agent for crude sulphur, to be exported to foreign countries covered by this agreement, shall be turned over to the Export Company for allocation and fulfillment, as herein provided if satisfactory to the Export Company.

3d. In case any Exporter or Exporters shall directly or indirectly export any crude sulphur otherwise than as herein provided, for each ton so exported there shall be a reduction in such offending Exporter's allotment provided for herein of two tons and an increase in the allotment of the other Exporter or Exporters of two tons which if allotted to two Exporters shall be divided equally between them.

3e. Each Exporter shall be obligated to fulfill such orders as may be allocated to it by the Export Company; but no allocation shall be made to any Exporter which interferes with its domestic business.

If any Exporter shall fail for any reason to fill the whole or any part of an allocated order the Export Company through the other Exporters may supply such deficiency, and such deficiency shall be deducted from the allotment of such delinquent Exporter as herein provided, unless in the opinion of the Board of Directors such failure was justifiable.

3f. All orders for the export of crude sulphur shall be placed with the Export Company which shall allocate them among the Exporters in such manner as not to interfere with their domestic trade and so that the total quantity of crude sulphur exported as herein provided during each year shall be supplied by the Exporters pro rata according to the percentage of their holdings of the Capital Stock of the Export Company. The allocation of such tonnage shall be made to the Exporters so that so far as is practicable at all times the tonnage allocated to each Exporter shall be in proportion to their respective stock holdings.

3g. In allocating shipments the Export Company shall give due consideration to the status existing at the time of this agreement, with respect to the respective customers of the Exporters and shall preserve such present status insofar as this may be practically done in the judgment of the Board of Directors without prejudice to the division of shipments herein provided.

3h. The Exporter to whom any order has been allocated shall fill the same by shipping for account of the Export Company the crude sulphur to the purchaser in accordance with the order. The Exporter shall prepare the invoices of shipments made by it on forms provided by the Export Company, and furnish the latter with such invoices. All invoices to purchasers shall specify the Exporter whose sulphur such invoices may cover.

3j. The Exporter to whom an order is allocated shall, unless otherwise advantageous in the opinion of the Export Company, arrange for freight thereon on standard gross form or charter party and insurance thereof on standard form, in the

name of and payable to the Export Company as owner, and the Exporter shall make payments of freight and insurance when due.

Immediately on completion of a delivery, the Exporter shall render a complete detailed statement to the Export Company of all items paid, including freight and insurance, demurrage, if any, and also of all credits, including dispatch. In these statements any additional freight or expense incurred by reason of loading at more than one port, or by reason of loading at ports other than Sabine, Texas City, or Galveston, shall be noted and excluded; and such additional expenses shall be exclusively for the account of the Exporter. The Export Company shall then reimburse the Exporter accordingly.

3k. The Board of Directors from time to time shall fix the price at which crude sulphur is to be sold c. i. f. various ports—payment therefor to be made in U. S. currency or its equivalent by the purchaser to the Export Company on presentation of draft with invoice shipping documents attached.

The Export Company shall keep a detailed ledger account for each shipment.

To these accounts will be charged all expenses after the cargo is loaded and trimmed on the vessel, either ordinary or extraordinary, of making the delivery abroad including freight, insurance, charges at foreign ports, agent's compensations, etc. To these accounts will be credited all dispatch money, rebates, commissions, credits on freights and all allowances under the charter party, and finally the remittance from the purchaser.

When an entire transaction has been completed the net balance shall be credited to a control account.

The current expenses of the Export Company shall be kept in detail account, and from time to time be closed out to the control account.

The Export Company shall on the 15th of each month furnish a statement to each of its members, which shall show:

(A) the total number of tons, the total credit, and the value of such credits per ton, contained in all completed shipments from the beginning of operations hereunder to the end of the preceding month.

(B) the total number of tons of completed shipments by each member from the beginning of operations hereunder to the end of the preceding month, and corresponding total credits at the value per ton as determined under "A."

The credits thus calculated on the tons supplied by any member shall be that member's share of the total credits and the Export Company shall, upon delivery of the statement to a member, pay it such share less the sum of all previous payments on account of its participation in closed transactions.

Such payments to be accompanied by complete detailed statement covering sales involved.

3l. No discount, rebate, or other special consideration to purchasers shall be allowed by any Exporter in connection with any sale hereunder except such as may be approved by the Board of Directors or executive committee.

4. The books of the Export Company shall be audited annually by certified public accountants to be selected by the Board of Directors. Any deficit which the Export Company may have as and when established by said audit shall in the discretion of the Board of Directors be made up by the Exporters ratably in proportion to their holdings of stock.

5. Any Exporter failing to perform this agreement by refusing to supply promised crude sulphur as herein provided, or by delay in delivery or faulty condition thereof, or by any other action or inaction, direct or indirect, which the Board of Directors of the Export Company may consider prejudicial to the Company, or of a character likely to be prejudicial shall be liable to the Export Company in a sum to be fixed by the Board of Directors or executive committee not in excess of ten per centum (10%) of the Export Company's c. i. f. price for such tonnage as liquidated damages, which shall be recouped as far as possible out of any sums then or thereafter owing to such Exporter by the Export Company, any part thereof not so recouped to be paid to the Export Company on demand.

6. Messrs. Henry Whiton, Eric P. Swenson, and Walter H. Alldridge hereby are constituted an Exporters' Committee with power in a majority to determine and conclude, consistently with the terms of this agreement, the details of organization of the Export Company, the terms and form of its certificate of incorporation and by-laws, and any and all matters incidental thereto and to from time to time make such construction or modification or enlargement of this agreement as shall in their judgment be deemed necessary or proper for the carrying out and performance of the intent of the parties hereto. All expenses of said Exporters' Committee shall be borne by the Export Company.

7. This agreement shall enure to the benefit of the Export Company, and shall be enforceable by and binding on the Export Company in respect of all its terms except as modified by said Exporters' Committee. It shall continue in full force

and effect until six (6) months' previous notice in writing is given by an exporter of its intention to withdraw. Upon any termination of this agreement the Export Company shall be dissolved and its assets distributed among the Exporters in accordance with their holdings of stock.

8. This agreement shall not be or be construed to be in any respect a partnership between the Exporters, or between the Exporters and the Export Company to be organized, or to be an agency between the Exporters, or any of them, and the Export Company.

In witness whereof the parties hereto above named have caused this agreement to be executed in quadruplicate in their respective corporate names by their respective presidents or vice presidents and impressed with their respective corporate seals, attested by their respective secretaries or assistant secretaries, as of the day and year first above written.

THE UNION SULPHUR COMPANY,
By HENRY WHITON, *President*. [SEAL]

Attest:

C. A. SNIDER, *Secretary*.

FREEPORT SULPHUR COMPANY,
By E. P. SWENSON, *President*. [SEAL]

Attest:

F. M. ALTZ, *Secretary*.

TEXAS GULF SULPHUR COMPANY,
By WALTER H. ALDRIDGE, *President*. [SEAL]

Attest:

H. F. J. KNOBLOCH, *Secretary*.

STATE OF DELAWARE,
County of Kent, ss:

Be it remembered, that on this 23rd day of October, A. D. 1922, personally came before me, Edwin F. Wood, a notary Public for the State of Delaware, C. H. Jarvis, M. E. Scanlon, and M. F. Vance, parties to the foregoing certificate of incorporation, known to me personally to be such, and severally acknowledged the said certificate to be the act and deed of the signers respectively and that the facts therein stated are truly set forth.

Given under my hand and seal of office the day and year aforesaid.

EDWIN F. WOOD, *Notary Public*.

EXHIBIT No. 383

COPY OF AGREEMENT BETWEEN FREEPORT SULPHUR COMPANY AND TEXAS GULF SULPHUR COMPANY, DATED OCTOBER 26, 1928, TO CONTINUE OPERATION OF SULPHUR EXPORT CORPORATION

Whereas The Union Sulphur Company, Freeport Sulphur Company, and Texas Gulf Sulphur Company entered into an agreement dated October 4, 1922, for the formation of a corporation to engage in the export of Sulphur from the United States under the provisions of the Act of Congress approved April 10, 1918, entitled "An Act to promote export trade and for other purposes," and such a corporation having been organized under the name "Sulphur Export Corporation" and having operated in accordance with the terms of the said agreement since October 22, 1922, and

Whereas The Union Sulphur Company has since December 31, 1924, ceased to produce sulphur and has since May 7, 1926, ceased to furnish sulphur to said Corporation under the said agreement and has now sold its shares in said Corporation in equal parts to Freeport Sulphur Company and Texas Gulf Sulphur Company, and has ceased to be a stockholder in the Sulphur Export Corporation organized pursuant to said agreement; and the sole stockholders of said Sulphur Export Corporation being Freeport Texas Company, nominee of Freeport Sulphur Company, and the Texas Gulf Sulphur Company, each of which owns one-half of the issued capital stock thereof and each of which is bound by agreement to subscribe for one-half of the remaining authorized amount as yet unissued as and when called upon so to do by the Board of Directors of said Corporation; and

Whereas The Union Sulphur Company has withdrawn from the said agreement of October 4, 1922; and

Whereas it seems desirable to Freeport Sulphur Company and to Texas Gulf Sulphur Company that they continue the operation of Sulphur Export Corporation for the purposes set forth in said agreement of October 4, 1922, without the further participation of the Union Sulphur Company therein;

Now, therefore, the said Freeport Sulphur Company and the said Texas Gulf Sulphur Company reaffirm and readopt as an agreement by and between themselves the provisions of the said export agreement of October 4, 1922, hereinbefore referred to, insofar as the same are or may be applicable to them, on the basis that in place of The Union Sulphur Company the said two first-mentioned companies are substituted in equal amount or proportion throughout.

FREEPORT SULPHUR COMPANY,
By E. P. SWENSON, *President*.

Attest:
[SEAL]

F. M. ALTZ, *Secretary*.
TEXAS GULF SULPHUR COMPANY,
By W. H. ALDRIDGE, *President*.

Attest:
[SEAL]

H. F. J. KNOBLOCH, *Secretary*.

Dated New York, October 26, 1928.

EXHIBIT No. 384

[Copy]

OCTOBER 9, 1934.

DUVAL TEXAS SULPHUR COMPANY,
Houston, Texas.

GENTLEMEN: Referring to our various telephone conversations, we will allocate to you five thousand long tons (5,000) 5% more or less, our option, same to be loaded by you during October–November 1934, at Corpus Christi, Texas, into steamers chartered by us.

Sulphur to be dry and of bright yellow color; 99½% purity on dry basis; free from arsenic and selenium; moisture in excess of ½% to be for your account. Any claims as to quality for your account.

Bills of Lading to be made in our name. Invoicing to be done by us. Price receivable by you will be on the basis of \$23.00 C. I. F. per ton of 2,240 lbs., based on outturn-weights, less the following agreed expenses:

1st. Freight \$4,000 per long ton less 50¢ per long ton for loading.

2nd. Insurance 5 cents per long ton.

3rd. Weighing at destination 8 cents per long ton.

4th. Superintendence 7 cents per long ton.

5th. Commission 40¢ per long ton.

Terms of payment about two weeks after completion of discharge of cargoes

Your acceptance of this proposal will constitute a contract between us.

Yours very truly,

SULPHUR EXPORT CORPORATION,
(Signed) By C. W. KEMMLER, *Treasurer*.

Accepted:

DUVAL TEXAS SULPHUR COMPANY,
By ASHCRAFT-WILKINSON COMPANY,
(Signed) LEE ASHCRAFT, *President*. (Its Agents.)

[Copy]

NEW YORK, October 9, 1934.

N. E. LENANDER, Esq.,
New York City, N. Y.

DEAR MR. LENANDER: Referring to our recent conversations as to possible arrangements which might be entered into between us for preserving the Scandinavian and Finnish markets for brimstone and for supplying these markets for the years 1935 and 1936, I am now authorized by my Board of Directors to join with you in the following method of securing these objects:

1. The shipments of the Orkla Grube Aktiebolag (hereinafter abbreviated to Orkla) shall not exceed seventy thousand (70,000) long tons of 1,016 kilos in each of the years 1935 and 1936, all of which shall be to Scandinavian and Finnish customers.

2. Sulphur Export Corporation (hereinafter abbreviated to Sulexco) will stand ready to supply the balance of tonnage required by the above markets for 1935 and 1936. Sulexco's price shall not be less than \$23.50 per ton of 1016, kilos c. i. f. during the year 1935.

3. Sulexco will pay Orkla one dollar (\$1) per ton for every ton sold and delivered as above during 1935 and 1936 up to 70,000 tons per year.

4. Sulexco reserves the right to increase its delivered price.

5. Sulexco shall have the right to allocate part of its tonnage to the Ufficio in accordance with the Sulexco Ufficio Agreement dated August 2, 1934.

6. The payments to be made by Sulexco to Orkla shall be by deposit in the National City Bank in New York City to the credit of Stockholm Enskilda Bank and shall be made quarterly beginning April 1, 1935 or as soon thereafter as possible and shall be based on confirmation of delivery of sulphur to Orkla buyers evidenced by their receipts or other equivalent statement furnished to Sulexco in New York City.

7. During the year 1935 Orkla shall take no steps towards adding to its present sulphur-producing plant and shall not commence production from any addition to the present plant before March 1, 1937.

8. During the year 1935, at a time mutually agreeable, the parties hereto will meet for the purpose of deciding on prices for the year 1936 and to discuss an equitable allotment of tonnage between themselves for the year 1937 and thereafter.

Your acceptance of the foregoing at the end hereof will constitute the contract between us.

Yours truly,

SULPHUR EXPORT CORPORATION,
(Signed) C. A. SNIDER, *President*.

Accepted on behalf of and subject to the approval of the Board of the Orkla Grube Aktiebolag.

(Signed) N. E. LENANDER.

[Copy]

AUGUST 24, 1934.

DUVAL TEXAS SULPHUR COMPANY,
Houston, Texas.

GENTLEMEN: Referring to our recent conversations we propose to allocate to you, out of orders already secured by us, five thousand long tons (5,000) 5%, more or less, our option, same to be loaded by you at Corpus Christi, Texas, during the balance of this year into steamer or steamers for shipment to Finland and or Sweden and or Norway and or Estonia.

We will arrange chartering either independently or in conjunction with you as may be most convenient.

Sulphur to be dry and of bright yellow color; 99½% purity on dry basis; free from arsenic and selenium; moisture in excess of ½% or be for your account. Any claims as to quality to be for your account.

Bills of Lading to be made in our name. Invoicing to be done by us. Price receivable by you will be twenty-one dollars seventy-five cents (\$21.75) C. I. F. per ton of 2,240 lbs., based on outturn weights, less the following expenses:

1st. Actual Freight.

2nd. Insurance at Cost.

3rd. Commission 40 cents per ton.

4th. Weighing at destination and weighing superintendence at cost.

5th. Consular Fees, if any, at cost.

6th. Bankers Collection Charges, if any, at cost.

Our terms of payments to the clients receiving this sulphur are, cash against documents on arrival of shipment. Under ordinary circumstances we should receive payment in about two weeks after discharge of cargo and thereupon payment will be made to you.

It is understood that you will not sell any other sulphur in the above-mentioned countries for the balance of this year without our consent.

Your acceptance of this proposal will constitute a contract between us.

Yours very truly,

SULPHUR EXPORT CORPORATION,
(Signed) By C. A. SNIDER, *President*.

Accepted:

DUVAL TEXAS SULPHUR COMPANY,
By ASHCRAFT WILKINSON Co.,
(Signed) LEE ASHCRAFT, *President*.

EXHIBIT No. 385

[Copy]

JUNE 8, 1934.

JEFFERSON LAKE OIL COMPANY, INC.,
 1106 New Orleans Bank Building, New Orleans, La.

GENTLEMEN: Referring to our recent conversations as to sales of crude sulphur in the export markets covered by the Sulphur Export Corporation during 1934, we understand that we are in accord on the following matters:

Information which either of us may secure as to local conditions in the above markets will be available to the other. There is to be mutual cooperation so that the tonnage exported by both of us may be distributed and sold in foreign markets in such a way as to maintain as far as possible the present schedule of prices and conditions of sale:

In order to insure the stability desired by both of us we will assist you in your efforts to obtain 59,150 long tons in the export market over and above what you have already sold, namely:

	Long tons
Aruba.....	10, 000
Mexico.....	900
Australia.....	12, 050
Scandinavia and Sweden.....	7, 800
Brazil.....	400
Argentine.....	400
	<hr/> 31, 550

Out of the above mentioned 59,150 long tons you agree to reserve:

1. 5,600 long tons, 5%, to be supplied on account of our contract with the British Acid Association

2. About 11,000 long tons to be supplied on account of orders already secured by us in Finland and Estonia

3. About 7,550 long tons to be supplied on account of orders already secured by us for shipment ex-store Harburg, Germany, and for the balance of about 35,000 long tons we will assist you in your efforts to obtain about 15,000 long tons in Australasia and about 20,000 long tons in France.

It is understood that should you sell any tonnage in markets other than those enumerated heretofore or should you be unable to sell tonnage in the countries as set forth, adjustment can be made by transferring tonnage from one market to another.

We should be glad to have your approval of the above understanding.

Yours very truly,

SULPHUR EXPORT CORPORATION,
 (Signed) By C. A. SNIDER, *President*.

Approved:

JEFFERSON LAKE OIL COMPANY, INC.,
 (Signed) A. A. MAYER.

EXHIBIT No. 386

SULPHUR EXPORT CORPORATION

Graybar Building, 420 Lexington Avenue

New York

CLARENCE A. SNIDER,
President.

Cable Address
 Sulxco, New York

JANUARY 18, 1939.

Attention of Mr. W. T. Chantland, Attorney.
 FEDERAL TRADE COMMISSION, -
 Washington, D. C.

Re: MR. CHANTLAND: Re investigation of Business Conditions by the Temporary National Economic Committee.

In reply with your request of January 16th we enclose copy of the agreement under which The Union Sulphur Company's stock in the Sulphur Export Cor-

poration was sold to the Freeport Sulphur Company and the Texas Gulf Sulphur Company.

The Freeport Sulphur Company advise me that they have made no other purchases from The Union Sulphur Company.

Inquiry has been made of Texas Gulf Sulphur Company as to any other contract or contracts for the purchases by it from The Union Sulphur Company of any other of its stock, assets, or plants.

I have been informed by Texas Gulf Sulphur Company that during the period in which it was a part of the group formed by The Union Sulphur Company, the Freeport Sulphur Company, and the Texas Gulf Sulphur Company, operating as Sulphur Export Corporation, that it acquired nothing from The Union Sulphur Company, but that prior to October 4th, 1922, when the group was formed, to wit, in July 1921, lands in Texas were conveyed by The Union Sulphur Company to Texas Gulf Sulphur Company in connection with a settlement of a pending law suit. In October 1928, The Union Sulphur Company retired from the group (its sole producing mine in Louisiana having become exhausted in 1924), thereafter The Union Sulphur Company, in February 1934, sold to Texas Gulf Sulphur Company a second-hand plant and equipment, which had been moved to Texas from Louisiana, together with appurtenant lands, and further that in August 1938, The Union Sulphur Company sold certain other lands in Texas to the Texas Gulf Sulphur Company.

I do not have copies of the conveyances referred to.

Yours very truly,

[S] C. A. SNIDER,
President.

THIS AGREEMENT dated the 26th day of October, 1928, made by and between The Union Sulphur Company, a corporation organized under the laws of the State of New Jersey, hereinafter called Party of the First Part, and Freeport Sulphur Company, a corporation organized under the laws of the State of Texas, Texas Gulf Sulphur Company, a corporation organized under the laws of the State of Texas, and Sulphur Export Corporation, a corporation organized under the laws of the State of Delaware, hereinafter called the Parties of the Second part, witnesseth:

WHEREAS the Party of the First Part is desirous of retiring from the group formed by and under a certain Agreement dated the 4th day of October 1922, made by and between The Union Sulphur Company, the Freeport Sulphur Company, and the Texas Gulf Sulphur Company, herein above named, and to terminate its liabilities and obligations thereunder, and also to the Sulphur Export Corporation, in said Agreement referred to, and has in pursuance thereof served the Notice required by Paragraph Seven of said Agreement, now therefore in consideration of the party of the first part waiving its right to have the Export Corporation, referred to in Paragraph Seven of the aforementioned Agreement, dissolved and its assets distributed, it is hereby agreed as follows:

FIRST: The Party of the First Part will surrender 1,123 shares of capital stock of the Sulphur Export Corporation now standing in its name, and one share of stock standing in the name of Henry Whiton, and will request Mr. C. A. Snider, to surrender one share of stock standing in his name, to such nominee or nominees as the parties of the second part may designate upon receipt of the sum of \$11,250.00.

SECOND: That the parties of the second part will and hereby do recognize the termination of the Agreement of October 4th, 1922, insofar as the Party of the First Part is concerned, and will forever hold said party of the first part free of all liability as a member of the group formed by the Agreement of October 4th, 1922, herein and above referred to, from this day on.

THIRD: That the party of the first part hereby releases the parties of the second part, and the parties of the second part do hereby release the party of the first part from all claims, obligations, and liabilities whatsoever under the said Agreement of October 4th, 1922, from the beginning of time up to the present day.

IN WITNESS WHEREOF the parties hereto above named have caused this agreement to be executed in quadruplicate in their respective corporate names by their respective presidents or vice presidents and impressed with their respective cor-

porate seals, attested by their respective secretaries or assistant secretaries, as of the day and year first above written.

[CORPORATE SEAL]

ATTEST:

GEORGE SCHERFF,
Secretary.

THE UNION SULPHUR COMPANY,
By HENRY D. WHITON, *President.*

[CORPORATE SEAL]

ATTEST:

F. M. ALTZ,
Secretary.

FREEPORT SULPHUR COMPANY,
By E. P. SWENSON, *President.*

[CORPORATE SEAL]

ATTEST:

H. F. J. KNOBLOCH,
Secretary.

TEXAS GULF SULPHUR COMPANY,
By W. H. ALDRIDGE, *President.*

[CORPORATE SEAL]

ATTEST:

JAMES T. KILBRETH,
Secretary.

SULPHUR EXPORT CORPORATION,
By C. A. SNIDER, *President.*

EXHIBIT No. 387

MEMORANDUM OF AGREEMENT MADE IN LONDON THIS FIRST DAY OF APRIL 1936 BETWEEN ORKLA GRUBE A. B. OF LOKKENVERK, NORWAY, AND THE SULPHUR EXPORT CORPORATION OF NEW YORK, U. S. A.

This Agreement is to take effect as of January 1st, 1937, and shall remain in force until December 31st, 1941, unless sooner terminated as hereinafter provided.

This Agreement is confined to the Continents of Europe, Asia, and Africa including adjacent islands, hereinafter called the joint territory.

It is agreed that sales in the joint territory made by the Sulphur Export Corporation and the Orkla Company shall be divided one-third to the Orkla Company and two-thirds to the Sulphur Export Corporation.

Commencing January 1st, 1937, sales will be proportioned in this ratio as nearly as may be and should either of the parties be behind in its tonnage that tonnage will be made up during the next year.

Information will be currently furnished by both parties to the other advising all sales which each party has made in the joint territory. The price at which these sales shall be made shall be mutually agreed upon at a meeting which shall take place in London not less than three months before expiration of each calendar year. If at this meeting no agreement is reached between the two parties as to prices for the coming year then either party may elect to cancel this Agreement to take effect on the following December 31st. The party desiring cancellation shall give notice to the other in writing to be mailed prior to November 1st.

It is contemplated that as soon as Orkla increases its production of brimstone above 70,000 tons per year and thereby releases to the pyrites industry any tonnage of pyrites which Orkla is now selling an endeavour will be made as soon as feasible through collaboration with the pyrites industry as soon as such tonnage is released to secure an equivalent brimstone tonnage in the joint territory. In no case without agreement between the parties shall the price of brimstone be less than 75/- c. i. f. and in no case shall an attempt be made to secure customers who would be in direct competition with present users of brimstone without the mutual consent of both parties.

Orkla agrees as far as lies in its power that it will not license to others the use of the Orkla process covered by patents which are now controlled by the Aktiebolaget Industrimetoder, Stockholm, nor to assist others in the development and use of the process other than as already committed.

It is recognized in principle by both parties that it may be desirable to secure through purchase or otherwise certain patents in the joint territory which may have a potential value in the production of sulphur in the joint territory. If any such patents are acquired they shall be acquired jointly by the two parties, payment being two-thirds by the Sulphur Export Corporation and one-third by Orkla. The title to such patents shall be held in trust by A. B. Industrimetoder, a subsidiary of Orkla which Company will endeavour to protect these patents for the mutual benefit of both parties and at their mutual expense in the propor-

tions mentioned. No license for such jointly owned patents shall be issued by A. B. Industrimetoder without the consent of both parties.

It is understood that as far as practicable sales of Orkla Sulphur shall be confined to Scandinavia and the countries bordering on the Baltic.

In case other American producers outside the Sulphur Export Corporation shall ship sulphur into the joint territory it shall be the option of the Orkla Company in case it does not wish to absorb its one-third portion of such loss of tonnage to cancel this Agreement giving to the Sulphur Export Corporation 90 days' notice of its wish so to cancel.

The Orkla Company has been advised of the existence of an agreement between the Ufficio per la Vendita dello Zolfo Italiano and the Sulphur Export Corporation. This present Agreement is subject to the concurrence of the Ufficio.

In case of a disagreement arising out of any matter in connection with the construction of this Agreement or performance thereof, which it may be found impossible to settle by amicable arrangement, the same shall be submitted to a Board of Arbitration to sit in London consisting of three members; one chosen by the Sulphur Export Corporation, one by the Orkla Company, and an Umpire to be chosen by the joint agreement of the first two arbitrators. In case of any party failing to appoint its arbitrator within fifteen days of the notice of the other party so to do, the party who has appointed an arbitrator may appoint that arbitrator to act as sole arbitrator in the reference, and his award shall be binding on both parties as if he had been appointed sole arbitrator by consent. In case of the first two arbitrators failing to agree within fifteen days of their nomination as to the appointment of the Umpire, such appointment shall be made by the President for the time being of the London Chamber of Commerce upon request of either of the parties.

In so far as not specially provided for in the present Agreement the arbitration shall be subject to the English Arbitration Act of 1889 or any statutory modification thereof at the time subsisting.

Any award shall be final and binding upon both parties.

SULPHUR EXPORT CORPORATION,
(Signed) By WILBER JUDSON, *Vice President*.

Attest:

B. C. HUGHES. (signed)

ORKLA GRUBE A. B.,
(Signed) By MARC WALLENBERG.

Attest:

N. E. LENANDER. (signed)

LONDON, April 1st, 1936.

Messrs. ORKLA GRUBE A. B.,
Lokkenverk, Norway.

GENTLEMEN: With reference to the Agreement made between us today, it has been further agreed as follows:

(1) The Sulphur Export Corporation will supply those customers substituting brimstone for pyrites as set forth in the Agreement, with, however, the right on the part of the Sulphur Export Corporation to have Orkla supply one-third of such total tonnage should the Sulphur Export Corporation so desire.

(2) In the event of the dissolution of the Sulphur Export Corporation the Agreement is to terminate and become null and void as from the date of such dissolution.

(3) In regard to that section of the Agreement reading:

"* * * in no case shall an attempt be made to secure customers who would be in direct competition with the present users of brimstone without the mutual consent of both parties,"

it is desired to place on record that this arises from a desire to avoid the difficulties which might come about through two Works in the same line of business and/or in close proximity obtaining supplies of brimstone at widely differing prices. It is considered to be in our best interests to avoid difficulties of this nature and the object of the clause in question is to ensure that there shall be full discussion and mutual agreement before any action is taken which might be detrimental to the interests of us both.

Your signature on the duplicate hereof will constitute your acceptance of the foregoing.

Yours truly,

SULPHUR EXPORT CORPORATION,
(Signed) By WILBER JUDSON, *Vice President*.

Confirmed and accepted:

ORKLA GRUBE A. B.,
(Signed) By N. E. LENANDER.

EXHIBIT No. 388

[Prepared by Federal Trade Commission staff from data secured from company's files]

FINANCIAL REPORT, INCLUDING INVESTMENTS, PROFITS, AND RATES OF RETURN
FOR TEXAS GULF SULPHUR COMPANY

INVESTMENTS, PROFITS, AND RATES OF RETURN

This discussion relates to the financial aspects of Texas Gulf Sulphur Company. The basic information concerning invested capital and earnings was obtained from the company's records in New York.

Texas Gulf Sulphur Company was incorporated in Texas in December 1909 as Gulf Sulphur Company, the name of which was changed to the present title in July 1918. The company is engaged in mining crude sulphur or brimstone in Texas and selling it in this country and abroad. It has been actively engaged in the production of sulphur since March 1919. Prior to that time its operations were confined to exploration and development. Systematic drilling was commenced in September 1917 and plant construction was begun in August 1918.

Table 1 which follows summarizes the investment, profits, and rates of return for Texas Gulf Sulphur Company for each of the years 1919 to 1938, inclusive. The investment consists of outstanding common stock, earned surplus, and reserve for contingencies, the totals of which were averaged as of the beginning and end of the year. The profits used in computing rates of return on the invested capital are before deductions for Federal income and profits taxes and represent the net income from all sources after providing for all costs and expenses of doing business.

The figures shown in the table appear to reflect actual investment and correct earnings. Depreciation and depletion, which are important factors in the determination of correct net income, were based on cost, although for tax purposes depletion charges for many years were made against income based on discovery values established in 1919 which were \$37,548,978 in excess of cost. However, neither the appreciation nor the depletion charges in excess of cost, which were permitted for tax purposes, are reflected in the computations set forth herein.

TEXAS GULF SULPHUR COMPANY

TABLE 1.—Summary of investments, profits, and rates of return, 1919–1938

Year	Investment				Profit ¹	Rate of return on investment
	Capital stock—common	Earned surplus	Reserve for contingencies	Total	Average at beginning and end of year	
						<i>Percent</i>
1919	\$6,350,000	\$967,928		\$7,317,928	\$5,158,964	\$993,605 19.26
1920	6,350,000	4,294,959		10,644,959	8,981,444	3,519,138 39.18
1921	6,350,000	5,528,458		11,876,458	11,260,709	1,941,499 17.24
1922	6,350,000	6,160,436		12,510,436	12,193,447	3,998,978 32.80
1923	6,350,000	6,874,316		12,224,316	12,867,376	4,972,240 38.64
1924	6,350,000	6,874,257		13,224,257	13,224,287	5,088,585 38.48
1925	6,350,000	6,945,377		13,295,377	13,269,817	6,027,637 45.46
1926	6,350,000	8,621,583	\$1,312,919	16,284,502	14,789,940	10,036,033 67.86
1927	6,350,000	10,463,627	2,275,165	19,088,792	17,686,647	13,109,692 74.12
1928	6,350,000	14,714,672	3,192,039	24,256,711	21,672,752	15,661,051 72.26
1929	6,350,000	20,739,233	3,831,968	30,921,291	27,588,956	17,624,073 63.88
1930	6,350,000	24,551,318	4,720,647	35,621,965	33,271,583	15,100,977 45.39
1931	6,350,000	25,238,921	4,370,786	35,959,707	35,790,836	9,772,047 27.30
1932	6,350,000	26,069,413	3,979,683	36,399,096	36,179,402	6,373,813 17.62
1933	6,350,000	30,338,026	1,925,208	38,613,234	37,506,165	7,956,893 21.21
1934	26,175,000	31,351,197	2,337,297	59,863,494	49,238,364	7,336,795 14.90
1935	26,175,000	31,139,214	2,300,706	59,614,920	59,739,207	8,178,017 13.69
1936	26,175,000	31,392,229	1,082,868	58,650,097	59,132,509	10,843,015 18.34
1937	26,175,000	32,421,510	1,015,191	59,611,701	59,130,899	12,864,281 21.76
1938	26,175,000	31,705,143	1,214,609	59,094,752	59,353,227	7,633,633 12.86
Annual average					29,401,327	8,451,600 28.75

¹ Before deducting provisions for Federal income and profits taxes.

The table shows that the company earned an average annual return on the investment of 28.75 percent during the 20 years, 1919-1938. It will be observed that the company's operations were profitable in every year during the period and reflect rates of return on the investment ranging from high's of 67.86 percent in 1926, 74.12 percent in 1927, 72.26 percent in 1928, and 63.88 percent in 1929 to a low of 12.86 percent in 1938.

The table shows that the average invested capital increased from \$7,317,928 in 1919 to \$59,094,752 in 1938, an increase of \$51,776,824. This increase is accounted for principally by increases of \$30,737,215 in earned surplus and \$19,825,000 in outstanding common stock.

It will be noted that the outstanding common stock stood at \$6,350,000 from 1919 to 1933 and at \$26,175,000 thereafter. The \$6,350,000 in stock was issued for \$6,000,464 in cash and \$349,536 in property. The additional \$19,825,000 of stock issued in 1934 was paid for sulphur properties and contracts rights acquired under an agreement with Delaware Gulf Oil Company.

Under the agreement with Delaware Gulf Oil Company, which was consummated in October 1934, Texas Gulf Sulphur Company issued 1,300,000 shares of common stock without par value and paid \$650,000 in cash in exchange for assets which were recorded on its books by authority of its stockholders at \$20,475,000, of which \$20,419,142.66 was reflected in "Contract rights released by, and rights and properties acquired from, Delaware Gulf Oil Company in 1934" and \$55,857.34 received in cash was recorded as such on its books. The 1,300,000 shares of common issued in the transaction were recorded on the books at \$19,825,000, equivalent to \$15.25 per share, that being substantially the book value per share of the capital stock outstanding immediately prior to the issuance of the stock. The value assigned to the stock issued and consideration received was based on an appraisal by Henry Krumb, stated to be an independent mining engineer of broad experience in the valuation of mining properties.

The events leading up to this transaction involved a working arrangement with Gulf Production Company whose assets were acquired by Delaware Gulf Oil Company, whereby Texas Gulf Sulphur Company had been operating certain sulphur properties under rights acquired from Gulf Production Company in June 1927. The details are set forth by the President of Texas Gulf Sulphur Company in a notice to the stockholders, dated August 3, 1934, which appears in full as an appendix to this report. The transaction is further summarized by the President of the Company in another letter to the stockholders, dated September 10, 1934, which reads in part as follows:

"Through the original contract of June 1927 with Gulf Production Company, the assignor of Delaware Gulf Oil Company, the Company acquired the right to operate certain sulphur properties in Texas (including Boling, now known as Newgulf, and Long Point) which have sulphur reserves sufficient to supply the present rate of demand for more than forty years. In consideration of these rights the Company agreed to pay Gulf Production Company 50% of the profits from each property operated under the contract, but only after it had reimbursed itself for its initial development and operating expenditures. Large tonnages of sulphur have already been sold from Newgulf and although the Company has not as yet been obligated to share any profits from the operation of the properties acquired under the contract of June 1927 the time is near when Delaware Gulf Oil Company will be entitled to receive 50% of the profits arising from sales of sulphur from Newgulf.

"The unmined reserves at Gulf (our wholly owned deposit) may be exhausted after a relatively brief period of production. Unless additional sources of sulphur can be obtained, eventually it will become necessary, as a matter of prior right, to pay to the Gulf Oil interests 50% of substantially all of the company's earnings.

"It is the opinion of the officers of your Company that as compared with the present assets of your Company, the assets to be acquired are at least equal in value to the cash and the 1,300,000 shares which will constitute about 33.85% of all the shares of the enlarged Company. Your Board of Directors unanimously recommend the transaction."

Table 2, which follows, summarizes the income and expenses, dividends paid, and surplus of Texas Gulf Sulphur Company for each of the years 1919 to 1938, inclusive, and accounts for the profits applicable to the invested capital on which rates of return have been computed.

TEXAS GULF SULPHUR COMPANY

TABLE 2.—Summary of income and expenses, dividend payments, and surplus, 1919-38

Year	Net sales	Costs and expenses				Net profit on sales
		Operating and delivery costs	Selling, general, and administrative expenses	Depreciation and amortization	Total costs and expenses	
1919.....	\$1,951,923	\$655,558	\$160,089	\$148,344	\$963,991	\$987,932
1920.....	6,371,100	1,942,657	438,740	506,534	2,887,931	3,483,169
1921.....	4,689,716	1,376,237	999,885	449,056	2,825,178	1,864,538
1922.....	7,278,721	2,070,567	779,955	588,574	3,439,096	3,839,625
1923.....	8,970,506	2,327,330	1,067,388	724,503	4,119,221	4,851,285
1924.....	8,453,348	2,195,033	599,412	687,011	3,481,926	4,971,422
1925.....	10,463,635	2,726,135	993,050	824,160	4,543,345	5,920,290
1926.....	16,039,861	3,862,661	1,096,798	1,166,968	6,126,427	9,913,434
1927.....	20,118,820	4,371,883	1,470,682	1,296,477	7,139,042	12,979,778
1928.....	23,547,223	4,854,825	1,735,044	1,419,616	8,009,485	15,537,738
1929.....	26,765,652	6,095,782	2,038,704	1,305,241	9,439,727	17,325,925
1930.....	23,233,144	6,418,414	2,067,418	83,183	8,569,015	14,664,129
1931.....	16,537,222	5,918,483	917,436	253,743	7,089,662	9,447,560
1932.....	12,349,665	5,039,718	932,460	233,313	6,205,491	6,144,174
1933.....	16,547,038	7,432,672	1,113,706	324,089	8,870,467	7,676,571
1934.....	15,715,541	6,464,469	1,487,832	724,457	8,676,938	7,038,603
1935.....	16,726,957	6,570,353	1,220,030	837,030	8,627,413	8,099,544
1936.....	20,945,442	7,489,437	1,639,290	1,144,780	10,273,507	10,671,935
1937.....	24,299,213	8,373,166	1,804,932	1,445,233	11,623,335	12,675,878
1938.....	16,047,002	5,746,364	1,782,984	1,005,448	8,534,796	7,512,206
Total.....	297,051,729	91,932,394	24,345,839	15,167,760	131,445,993	165,605,736

Year	Miscellaneous income	Net income before Federal taxes	Provision for Federal income and profits taxes	Net income	Dividends paid	Surplus end of year
1919.....	\$5,673	\$993,605	\$25,677	\$967,928	-----	\$967,928
1920.....	35,969	3,519,138	192,107	3,327,031	-----	4,294,959
1921.....	76,961	1,941,499	75,000	1,866,499	\$635,000	5,526,468
1922.....	159,353	3,998,978	190,000	3,808,978	3,175,000	6,160,436
1923.....	120,955	4,972,240	289,610	4,682,630	3,968,750	6,874,316
1924.....	117,163	5,088,585	326,144	4,762,441	4,762,500	6,874,257
1925.....	107,347	6,027,637	400,267	5,627,370	5,556,250	6,945,377
1926.....	122,599	10,036,033	739,827	9,296,206	7,620,000	8,621,583
1927.....	129,914	13,109,692	1,107,648	12,002,044	10,160,000	10,463,627
1928.....	123,313	15,661,051	1,250,006	14,411,045	10,160,000	14,714,672
1929.....	298,148	17,624,073	1,439,512	16,184,561	10,160,000	20,739,233
1930.....	436,848	15,100,977	1,128,892	13,972,085	10,160,000	24,551,318
1931.....	324,487	9,772,047	829,444	8,942,603	8,255,000	25,238,921
1932.....	229,639	6,373,813	463,321	5,910,492	5,080,000	26,069,413
1933.....	280,322	7,956,893	513,280	7,443,613	3,175,000	30,338,026
1934.....	298,192	7,336,795	593,624	6,743,171	5,730,000	31,351,197
1935.....	78,473	8,178,017	710,006	7,468,017	7,680,000	31,139,214
1936.....	171,080	10,843,015	990,000	9,853,015	9,600,000	31,392,229
1937.....	188,403	12,864,281	1,275,000	11,589,281	10,560,000	32,421,510
1938.....	121,427	7,633,633	670,000	6,963,633	7,680,000	31,705,143
Total.....	3,426,266	169,032,002	13,209,359	155,822,643	124,117,500	-----

Table 2 shows that during the 20-year period from 1919 to 1938, inclusive, earned surplus of \$31,705,143 had been accumulated despite the large amounts paid out in dividends. This surplus is accounted for by accumulated net earnings of \$155,822,643, less dividends paid of \$124,117,500 on the company's outstanding common stock.

The trend in earnings from year to year and the extent of the earnings in relation to sales is indicated by table 3 which follows. This table shows for each of the years 1919 to 1938, inclusive, the ratio of costs, expenses, and profits to net sales, expressed in cents per dollar of net sales.

TABLE 3.—*Ratios of costs, expenses, and profits to net sales, of Texas Gulf Sulphur Co., expressed in cents per dollar of net sales, 1919-38*

Year	Costs and expenses	Net profit on sales	Miscellaneous income	Net income before Federal income taxes	Provision for Federal income and profits taxes	Net income for year
	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
1919.....	49.39	60.61	.29	60.90	1.31	49.59
1920.....	45.33	54.67	.56	55.23	3.01	52.22
1921.....	60.24	39.76	1.64	41.40	1.60	39.80
1922.....	47.25	52.75	2.19	54.94	2.61	52.33
1923.....	45.92	54.08	1.35	55.43	3.23	52.20
1924.....	41.19	58.81	1.39	60.20	3.56	56.34
1925.....	43.42	56.58	1.03	57.61	3.83	53.73
1926.....	38.20	61.80	.77	62.57	4.61	57.96
1927.....	35.48	64.52	.65	65.17	5.61	59.66
1928.....	34.01	65.99	.52	66.51	5.31	61.20
1929.....	35.27	64.73	1.12	65.85	5.38	60.67
1930.....	36.88	63.12	1.88	65.00	4.86	60.14
1931.....	42.87	57.13	1.96	59.09	5.01	54.08
1932.....	60.25	49.75	1.86	61.61	3.75	47.86
1933.....	53.61	46.39	1.69	48.08	3.10	44.98
1934.....	55.21	44.79	1.90	46.69	3.78	42.91
1935.....	51.58	48.42	.47	48.89	4.24	44.65
1936.....	49.05	50.95	.82	51.77	4.73	47.04
1937.....	47.63	52.17	.77	52.94	5.25	47.69
1938.....	53.19	46.81	.76	47.57	4.18	43.39
Average.....	44.25	55.75	1.15	56.90	4.45	52.45

The table shows that for the 20 years, 1919 to 1938, inclusive, costs and expenses averaged 44.25 cents out of every dollar of sales, net profits on sales averaged 55.75 cents per dollar of net sales, and the net income averaged 52.45 cents per dollar of sales after taking into account miscellaneous income and provisions for Federal income and profits taxes. Stated another way, the average net profit on sales was 126 percent of cost and expenses and the average net income to the company was 199 percent of costs and expenses.

Table 4, which follows, shows the compensation paid to officers of Texas Gulf Sulphur Co. for each of the years 1929 to 1938, inclusive.

TABLE 4.—*Salaries of officers of Texas Gulf Sulphur Co., 1929-38*¹

Year	W. H. Aldridge, president	W. Judson, vice president	C. F. Ayer, vice president	H. F. J. Knoblock, secretary and treasurer	R. T. Fleming, assistant secretary	H. R. Brainard, assistant secretary	W. Attwood, assistant treasurer	E. R. Diekmann, assistant treasurer	Total
1929.....	\$50,000	\$30,000	\$10,000	\$24,000	\$13,512.50	\$3,875.50	\$6,900.00	\$6,900	\$145,188.00
1930.....	50,000	40,000	10,000	24,000	17,250.00	4,068.13	8,797.50	\$ 8,280	162,395.63
1931.....	50,000	40,000	10,000	24,000	15,000.00	3,600.00	7,800.00	5,400	155,800.00
1932.....	50,000	40,000	10,000	24,000	15,000.00	3,600.00	7,800.00	5,400	155,800.00
1933.....	50,000	40,000	10,000	24,000	15,000.00	3,600.00	7,800.00	5,400	155,800.00
1934.....	50,000	40,000	10,000	24,000	15,000.00	3,600.00	7,800.00	5,400	155,800.00
1935.....	50,000	40,000	10,000	24,000	15,000.00	3,600.00	7,800.00	5,400	155,800.00
1936.....	50,000	40,000	10,000	24,000	15,000.00	3,600.00	7,800.00	5,400	155,800.00
1937.....	50,000	40,000	10,000	24,000	18,000.00	4,200.00	9,600.00	6,000	161,800.00
1938.....	50,000	40,000	10,000	24,000	18,000.00	4,200.00	9,600.00	6,000	161,800.00
Total....	500,000	390,000	100,000	240,000	156,762.50	37,943.63	81,697.50	59,580	1,665,983.63

¹ Salaries do not include directors' fees of \$50 per meeting.² Paid to E. C. Meagher, assistant treasurer.

TEXAS GULF SULPHUR COMPANY,
75 East Forty-Fifth Street, New York, August 3, 1934.

NOTICE TO STOCKHOLDERS

To the Stockholders of Texas Gulf Sulphur Company:

CONTRACT WITH GULF PRODUCTION COMPANY

In June 1927 Texas Gulf Sulphur Company entered into a contract with Gulf Production Company (a wholly owned subsidiary of Gulf Oil Corporation operating only in Texas) for acquisition of certain interests in sulphur properties in Wharton and Fort Bend Counties, Texas, including, for a period of five years, certain rights of exploration and options on other lands in which there were indications of sulphur. As a part of the consideration for this contract, your Company agreed to pay to Gulf Production Company one-half of the net profits from each sulphur deposit it operated under the contract, but only after it had reimbursed itself for its necessary expenditures, including initial development and operating expenses incurred in getting the properties on a paying basis.

Under this contract your Company equipped Boling Dome, now known as Newgulf, Wharton County, Texas, and (under a supplemental contract) Long Point Dome, Fort Bend County, Texas, for the production of sulphur. Your Company is now producing sulphur from these lands as well as from additional lands under other leases and ownerships. By the execution of this contract your Company assured itself of sulphur reserves which, it is estimated, at the approximate present production rate, will have a life of over forty years.

OPERATIONS UNDER THE CONTRACT

The diverse interests in future profits from the properties subject to the contract and the terms of the contract itself result in certain complexities and difficulties of operation of these properties and also increase the problems incident to the operation of the other properties of your Company. With the time approaching when division of profits must be made as provided in the contract, the officers of your Company have given careful consideration both to the difficulties of operating under the terms of the contract and to the effect which the division of profits would have upon the earnings of your Company. The situation may be summarized as follows:

1. The contract requires that your Company must maintain certain operations at and sales from the sulphur deposits subject thereto; it provides for the exercise by Gulf Production Company of certain supervisory functions for the protection of its interests under the contract; and it requires complicated accounting.

2. The contract, as above stated, provides for the payment of 50 percent of your Company's profits from the Newgulf and Long Point operations to Gulf Production Company after reimbursement through earnings of certain initial development and operating costs. The complexities of the operating and accounting problems resulted in different interpretations by your Company and Gulf Production Company both as to what expenditures the reimbursement provision applies and as to the exact date when such reimbursements should be completed and when such payments should begin. Repeated efforts to adjust these and other differences have failed. However, it is clear from the terms of the contract that your Company has already received in earnings from its operations at Newgulf a large proportion of the total sum which it may expect in reimbursement, and the division of such earnings in the near future will be necessary.

3. The reserves in the sulphur deposit at Gulf, Matagorda County, wholly owned by your Company in fee, and from which your Company has produced approximately twelve million tons in the last fifteen years, are small as compared to the reserves at Newgulf. Operations at Gulf are temporarily shut down, but when they are resumed, the unmined reserves possibly may be exhausted after a relatively brief period of production, compared to the period of production within which it is estimated that the reserves at Newgulf would be exhausted. The inventory of mined sulphur at Gulf will at current rate of shipments be exhausted in some three years time. In the event of the exhaustion, both of reserves and inventory at Gulf, and unless in the meantime your Company has been able to develop other sulphur production, which would involve large capital expenditures, it would then necessarily have to divide substantially all its earnings equally with the Gulf Oil interests.

ASSIGNMENT OF CONTRACT

Gulf Production Company has transferred to Delaware Gulf Oil Company, another of the Gulf group of companies, all its interests under the aforesaid contract and amendatory and supplementary contracts and in addition certain other valuable sulphur properties and sulphur rights located in the State of Texas including an option by which Delaware Gulf Oil Company shall have the right for ten years from July 4, 1934, to acquire without additional consideration all sulphur interests of Gulf Production Company in properties in Texas.

PROPOSAL OF DELAWARE GULF OIL COMPANY TO YOUR COMPANY

Delaware Gulf Oil Company has now made a written proposal dated July 24, 1934, to your Company to transfer to it all of such contract and property rights (which constitute the former's entire assets), in exchange for 1,300,000 shares of new stock plus a sum of money in cash for each such new share equal to the amount of dividends per share which may be paid or declared by your Company on its now existing stock between June 16, 1934, and the date of issuance of the new shares. The above property rights consist chiefly of fee and royalty interests. In a few instances certain minor royalty obligations will be assumed. This proposal has been accepted provisionally by your President, and for the purpose of carrying out said proposal and acceptance, your President and the President of Delaware Gulf Oil Company have executed a contract, a copy of which is enclosed herewith, marked Exhibit A, which contract, when approved by the Directors and Stockholders of both Companies, will constitute a binding and enforceable agreement.

ADVANTAGES TO YOUR COMPANY

The officers of your Company believe that acceptance of the proposal will result in the following advantages:

1. Under unified ownership and management the properties of your Company now owned or hereafter acquired can be operated in a more efficient manner than is now or would be possible under the existing contractual restrictions; and your Company will attain thereby a wholly independent position permitting sales from whatever properties and in whatever amounts may be deemed in its best interest.

2. Your Company will acquire among other assets of Delaware Gulf Oil Company an option which will give it the right to acquire for a period of ten years without additional consideration all sulphur interests of Gulf Production Company in properties in Texas.

3. The interest of Delaware Gulf Oil Company now consists of fee and royalty interests in, and a 50 percent contractual interest in the profits from the properties subject to the existing contract, after reimbursement to your Company of initial development and operating expenses. Such fee and royalty interests and such 50 percent contractual interest in the profits will be exchanged for a stock interest in your Company of approximately 33.85 percent representing an equivalent interest in the profits from all of the properties of your Company.

INDEPENDENT ENGINEERING REPORT

In order to obtain corroboration of the opinions of your Company's own officers and engineers as to the desirability and the fairness of the proposal from your Company's standpoint, your Board of Directors retained the services of Mr. Henry Krumb, an independent mining engineer of broad experience in the valuation of mining properties. After an examination of your Company's sulphur properties and the sulphur properties and interests of Delaware Gulf Oil Company to be acquired by your Company, Mr. Krumb has given his opinion that the rights, properties, and benefits to be received by your Company are at least equal to the value of the 1,300,000 shares of stock to be issued and the cash to be paid in exchange therefor, that the proposed exchange is more favorable to Texas Gulf Sulphur Company's stockholders than continued operation under the present contract even though the courts should confirm your Company's interpretation of the contract, and he therefore recommends the acceptance of the proposal of Delaware Gulf Oil Company.

Your Directors, concerning with the recommendations of the operating officers of your Company and of Mr. Henry Krumb, have unanimously agreed, subject to the approval of the stockholders, to approve and ratify the contract with Delaware Gulf Oil Company enclosed herewith. The Directors and Officers of your

Company unanimously recommend to the stockholders the proposed exchange, believing that it is fair and advantageous to your Company.

NECESSITY TO AUTHORIZE INCREASE IN CAPITAL STOCK

In order therefore to accept the proposal of Delaware Gulf Oil Company, involving as it does the issuance to it of 1,300,000 shares of your Company's capital stock, it is necessary to increase the capital stock of your Company from 2,540,000 shares without nominal or par value to 3,840,000 shares. Approval by a vote of two-thirds of the capital stock of your Company is necessary to effect such an increase. To this end and to approve and ratify the aforesaid contract with Delaware Gulf Oil Company, a special meeting of the stockholders of record at the close of business on August 24, 1934, has been called for September 24, 1934, at 11 o'clock A. M., at the offices of your Company in Houston, Texas. In the event that you are unable to attend the meeting in person your prompt execution of the enclosed proxy is desired. Please sign, have witnessed, and mail the proxy in the enclosed stamped envelope to Henry F. J. Knobloch, Secretary, 75 East 45th Street, New York, N. Y.

By Order of the Board of Directors.

WALTER H. ALDRIDGE,
President.

EXHIBIT No. 389

[Prepared by Federal Trade Commission staff from data secured from company's files]

FINANCIAL REPORT, INCLUDING INVESTMENTS, PROFITS, AND RATES OF RETURN FOR FREEPORT SULPHUR COMPANY

INVESTMENTS, PROFITS, AND RATES OF RETURN

This discussion relates to the financial details of Freeport Sulphur Company. The underlying details concerning invested capital and earnings were obtained from the company's records in New York.

Freeport Sulphur Company was incorporated in Delaware in September 1913 as Freeport Texas Company, the name of which was changed to the present title in December 1936. Freeport Texas Company was a holding company whose principal subsidiary was a Texas corporation by the name of Freeport Sulphur Company which was engaged in the business of producing and marketing sulphur. In December 1936 the operating company transferred its assets to the holding company, whereby Freeport Texas Company became an operating company. In the same month the name of Freeport Texas Company was changed to Freeport Sulphur Company.

For many years the principal producing property of Freeport Sulphur Company was located in Brazoria County, Texas, and was known as Bryanmound. Operations of this property, which was owned in fee, were discontinued in 1935 because of the exhaustion of sulphur. At present sulphur is produced from two properties operated under leaseholds, one of which is known as Hoskins Mound in Brazoria County, Texas, and the other as Grande Ecaille in Plaquemines Parish, Louisiana. The Hoskins Mound sulphur lease was obtained from The Texas Company under an agreement dated March 14, 1922, and the Grande Ecaille lease was obtained from Gulf Refining Company of Louisiana, Shell Petroleum Corporation, and Humble Oil and Refining Company, through an agreement dated February 10, 1932. Operations at Hoskins Mound were commenced in March 1923, and the operations at Grande Ecaille were begun in December 1933.

In 1931 the company acquired control of Cuban-American Manganese Corporation, and at the end of 1938 owned 89.84% of the total outstanding voting shares of all classes of the latter company's stock. Cuban-American Manganese Corporation is engaged in the production of manganese from properties located near Santiago, Cuba.

Table I, which follows, summarizes the investments, profits, and rates of return for Freeport Sulphur Company and its predecessor, Freeport Texas Company and subsidiaries, for each of the years 1919 to 1938, inclusive. The investment consists of outstanding capital stocks, surplus, and surplus reserves, the totals of which were averaged as at the beginning and end of each year. The profits used in computing rates of return on invested capital are before deductions for Federal income and profits taxes and represent the net income to the companies from all sources.

The figures shown in the table appear to reflect actual investment and correct earnings. Depreciation and depletion, which are important factors in the determination of correct net income, were based on cost although for tax purposes depletion charges for many years were made against income on appreciated values, which amounted to \$29,331,127 in 1919. However, neither the appreciation nor the depletion charges in excess of cost, which were permitted for tax purposes, are reflected in the computations set forth herein.

FREEPORT SULPHUR COMPANY

TABLE 1.—Summary of Investments, Profits and Rates of Return, 1919–1938

Year	Capital stock		Reserve for contingencies and Federal income taxes	Earned surplus	Capital surplus	Total	Average at beginning and end of year	Profit	Rate of return on total investment
	Preferred	Common							
1919.....		\$3,500,000		\$4,599,561		\$8,099,561	\$9,631,671	\$1,184,625	¹ 12.30
1920.....		3,500,000		5,212,455		8,712,455	8,406,008	981,884	11.68
1921.....		3,500,000		4,720,027		8,220,027	8,466,241	181,407	¹ 2.14
1922.....		7,323,022		4,466,530		11,789,552	10,004,750	¹ 115,653	¹ 1.16
1923.....		7,323,022		5,236,640		12,559,662	12,174,607	1,013,225	8.32
1924.....		7,323,022		4,673,119		11,996,141	12,277,902	162,465	1.32
1925.....		7,323,022		4,225,479		11,548,501	11,772,321	891,172	7.57
1926.....		7,323,022		6,261,458		13,584,480	12,566,491	1,919,552	15.28
1927.....		7,323,022		6,751,507		14,074,529	13,829,505	4,061,381	29.37
1928.....		7,323,022		5,239,015		12,562,037	13,318,283	3,645,047	27.37
1929.....		7,323,022		3,357,641		10,680,663	11,621,350	5,080,777	¹ 43.72
1930.....		7,323,022		2,903,370		10,226,392	10,453,528	3,456,569	33.07
1931.....		7,323,022	\$540,969	3,179,199		11,043,190	10,634,791	3,635,343	¹ 24.78
1932.....		7,323,022	789,354	3,749,957		11,862,333	11,452,762	2,443,098	21.33
1933.....	\$1,581,600	7,846,638	644,446	4,603,118	\$1,135,980	15,811,782	13,837,058	2,773,540	20.05
1934.....	1,230,100	7,963,805	540,616	4,415,105	1,370,313	15,119,939	15,465,861	1,625,089	10.51
1935.....	1,230,100	7,963,805	550,631	5,037,038	1,370,313	16,151,887	15,635,913	1,642,108	10.50
1936.....	1,230,160	7,963,805	497,344	5,962,239	1,370,313	17,023,801	16,587,844	2,487,969	15.00
1937.....	1,230,160	7,963,805	526,928	7,397,616	1,370,313	18,488,762	17,756,282	2,897,690	16.32
1938.....		7,963,800	460,523	7,264,787	1,370,313	17,459,423	17,974,093	¹ 1,677,630	¹ 9.33
Annual av.....							12,693,365	¹ 2,014,120	¹ 15.87

¹ Denotes loss.

¹ 13 months.

¹ See "Exhibit No. 359-A," *infra*, p. 2253.

The table shows that during the twenty-year period, 1919–1938, the company earned an annual average rate of return of 15.87% on the average investment. It will be noted that the operations of the company were profitable in all years except 1921 and 1922, when losses were incurred equivalent to 2.14% and 1.16%, respectively, on the investment. High rates of return on the investment were earned during each of the years 1927 to 1931, inclusive. During these years rates of return of 29.37% were earned in 1927; 27.37% in 1928; 43.72% in 1929 (13 months); 33.07% in 1930; and 24.78% in 1931. Thereafter, the rates of return declined to 10.50 percent in 1935, then increased to 16.32 percent in 1937 and again declined to 9.33 percent in 1938.

If the investment in the stocks of Cuban-American Manganese Corporation, which amounted to about \$3,900,000 at the end of 1938, is eliminated from the total investment, the average return for the twenty-year period would be approximately 2 percent higher than the average return of 15.87 percent shown in the table, and the returns for the years 1931–1938 would be higher than those shown in the table by approximately 3 percent for the years 1931–1933, 2 percent for the years 1934 and 1935, 3 percent for 1936, and 2 percent for the years 1937 and 1938.

The table shows that the average invested capital increased from \$8,099,561 in 1919, to \$17,459,423 in 1938, an increase of \$9,359,862. This is accounted for principally by increases of \$4,463,800 in outstanding capital stock and \$4,035,539 in surplus, of which \$2,665,226 represented earned surplus and \$1,370,313 represented capital surplus.

The increase of \$4,463,800 in outstanding capital stock during the years 1919–1938 is accounted for in part by the issuance in 1922 of \$3,823,022 of additional common stock for the purpose of retiring obligations and providing funds for new

construction and in part to a net increase of \$640,778 in outstanding stocks between 1932 and 1938.

In February 1933, the capitalization of the company was changed from 732,000 shares of capital stock without par value to 850,000 shares of the par value of \$10 per share, and 25,000 shares of 6% cumulative preferred stock of the par value of \$100 per share. The purpose of this increase was to provide funds for the development of the Grande Ecaille sulphur deposits. The preferred stock was convertible into common stock at \$30 per share until February 1, 1938, and thereafter at \$40 per share until February 1, 1945. Of the 25,000 shares of issued preferred stock, 12,699 were converted into common stock and 12,301 shares were retired for cash at \$103 per share in March 1938. These transactions, including the sale of 15,000 shares of common for cash and the issuance of 9,206½ shares for stock of Cuban-American Manganese Corporation, accounted for an increase in capital between 1932 and 1938 of \$2,011,091, of which \$640,778 was reflected in capital stock account and \$1,370,313 in capital surplus account.

Table 2, which follows, summarizes the income and expenses, dividends paid, and surplus of Freeport Sulphur Company and its predecessor, Freeport Texas Company and subsidiaries, for each of the years 1919 to 1938, inclusive, and accounts for the profits applicable to the invested capital on which rates of return have been computed.

It should be noted that sales and cost of goods sold for the years 1919-1929 are not strictly comparable with the sales and cost of goods sold for the years 1930-1938 for the reason that after December 1, 1929, charges for outward freight, handling and allowances were deducted from gross sales to arrive at net sales whereas prior thereto such charges were included in costs. However, the difference in classification does not materially affect the comparisons.

FREEPORT SULPHUR COMPANY

TABLE 2.—Summary of income and expenses, dividend payments and surplus, 1919-38

Year	Sales		Costs and expenses			Net profit on sales	Miscellaneous income	Net income before Federal taxes	Provision for Federal taxes	Net income	Dividends paid	Prospecting and contingencies	Other surplus plus depletion (net)	Other surplus additions (net)	Surplus end of year
	Cost of goods sold	Selling, general, and administrative expenses	Depreciation and amortization	Total costs and expenses	Net profit on sales										
1919	\$3,440,234	\$850,568	\$309,136	\$2,393,600	\$1,055,544	\$120,081	\$1,184,625	\$79,193	\$1,105,432	\$2,090,000			\$2,169,651		\$4,594,561
1920	4,656,710	891,359	383,504	3,397,002	1,069,708	77,824	981,884	175,719	806,165			\$191,735	1,536		5,212,455
1921	3,263,256	2,173,656	372,492	3,286,013	1,757	179,680	981,884	104,183	878,696			108,312	298,526		4,720,027
1922	5,039,799	3,976,133	872,884	4,256,356	1,34,574	18,921	115,653	60,751	54,902			77,093			4,465,530
1923	6,102,036	3,976,985	831,615	5,173,811	978,225	35,000	1,013,225	112,439	900,786			130,676			5,226,640
1924	4,863,743	3,479,826	941,522	4,220,308	143,435	19,030	162,465	243,578	781,115			244,649			4,673,119
1925	7,227,878	1,092,275	267,516	6,401,180	826,698	64,474	891,172	140,862	750,310						4,228,479
1926	9,422,899	6,520,829	1,092,275	7,571,840	1,851,059	68,493	1,919,552	110,511	1,809,041						6,261,458
1927	13,363,630	8,633,810	761,716	11,885,236	9,583,762	281,513	4,061,381	325,781	3,735,604						6,751,307
1928	13,173,890	8,694,615	761,951	11,127,276	9,427,455	118,761	3,645,047	369,471	3,275,576						5,230,015
1929 (13 months)	16,054,731	10,056,086	848,227	12,222,363	9,225,998	153,322	5,080,777	635,821	4,444,956						3,357,041
1930	12,009,236	8,131,433	732,712	9,007,535	3,883,238	73,331	3,456,569	332,384	3,124,185						2,903,370
1931	9,359,155	5,849,878	552,077	6,709,421	2,649,734	14,391	2,635,343	256,561	2,378,782						3,179,199
1932	7,716,494	4,050,351	525,297	5,296,365	2,420,129	22,969	2,443,098	248,000	2,195,098						3,749,567
1933	8,707,689	4,983,724	578,393	5,973,234	2,734,455	39,385	2,773,840	235,000	2,538,840						4,003,118
1934	7,988,458	5,363,410	635,936	5,722,392	2,266,063	208,913	1,625,089	148,000	1,477,089						4,415,105
1935	8,845,865	6,106,642	599,647	6,706,289	2,139,576	43,545	1,625,108	150,000	1,475,108						5,037,038
1936	10,998,645	7,364,270	596,337	8,660,758	2,337,887	90,972	2,487,969	287,000	2,200,969						5,962,239
1937	12,640,067	7,673,687	559,995	9,773,356	2,866,711	30,929	2,897,690	270,000	2,627,690						7,397,016
1938	9,032,638	5,794,781	580,969	7,316,650	1,715,988	28,358	1,677,636	165,000	1,512,636						7,264,787
Totals	174,546,023	112,733,977	15,139,889	7,477,329	135,351,195	39,194,828	1,087,576	40,282,404	4,452,254	35,830,150	28,147,584	2,811,693	5,783,204		513,338

NOTE.—After Dec. 1, 1929, outward freight, handling and allowances were deducted from gross sales to arrive at net sales; prior thereto, such charges were included in costs and expenses. Income and expenses for 1929 are for 13 months, on account of changes from fiscal to calendar-year basis.

* Includes principally additional income and profits tax for 1918 of \$1,276,728.

† Net refund of Federal income and profits tax for 1917.

‡ Net loss on sale of capital assets.

§ Includes principally depreciation of \$966,956 applicable to prior years and loss of \$332,805 from sale of marine equipment.

* Accumulated losses of Cuban-American Manganese Corporation and subsidiaries applicable to stock held by Freeport Sulphur Co.

† Profit of Cuban-American Manganese Corporation and subsidiaries applicable to stock held by Freeport Sulphur Co.

‡ Net loss on sale of capital assets.

§ Includes principally depreciation of \$966,956 applicable to prior years and loss of \$332,805 from sale of marine equipment.

* Accumulated losses of Cuban-American Manganese Corporation and subsidiaries applicable to stock held by Freeport Sulphur Co.

† Profit of Cuban-American Manganese Corporation and subsidiaries applicable to stock held by Freeport Sulphur Co.

‡ Net loss on sale of capital assets.

§ Includes principally depreciation of \$966,956 applicable to prior years and loss of \$332,805 from sale of marine equipment.

Table 2 shows that during the twenty-year period from 1919 to 1938, inclusive, sales aggregated \$174,546,023, costs and expenses \$135,351,195, and net income \$35,830,150 after taking into account miscellaneous income and provisions for Federal income and profits taxes. Dividend payments of \$28,147,584 and other net charges to surplus of \$8,081,559 exceeded the net income for the period by \$398,993, so that the earned surplus of \$7,264,787 at the end of 1938 was less by that amount than the surplus at the beginning of 1919.

As shown by the table, dividends were paid in 1919 and in each of the years 1927 to 1938, inclusive. Of the total dividend payments of \$28,147,584 during the twenty-year period, \$27,717,111 was paid on common stock at varying rates during the years 1919 and 1927-1938, and \$430,473 was paid on the 6% cumulative preferred stock during the years 1933-1938.

It is of interest to note that the cost of goods sold, which aggregated \$112,733,-977 for the 20 years, includes payments of royalties to The Texas Company during the years 1924-1938 of \$29,046,250 under the contract of March 14, 1922 relating to Hoskins Mound and payments of royalties to Gulf Refining Company of Louisiana, Shell Petroleum Corporation, and Humble Oil & Refining Company during the years 1934-1938, aggregating \$4,144,979 under the contract of February 13, 1932, relating to Grande Ecaille. The payments under the latter contract were, in addition to cash considerations aggregating \$500,000 for the lease. As previously stated, Hoskins Mound and Grande Ecaille are the two properties from which sulphur is now produced by Freeport Sulphur Company.

The trend in earnings from year to year and the extent of earnings in relation to sales are indicated by Table 3, which follows. This table shows for each of the years 1919 to 1938, inclusive, the ratios of costs, expenses and profits to net sales expressed in cents per dollar of net sales.

The table shows that for the twenty-year period, costs and expenses averaged 77.54 cents out of every dollar of sales, net profit on sales averaged 22.46 cents per dollar of sales, and net income averaged 20.53 cents per dollar of sales after taking into account miscellaneous income and provisions for Federal income and profits taxes. Stated in another way, net profit on sales averaged approximately 29 percent of costs and expenses and the final net income averaged approximately 26½ percent of costs and expenses.

FREEPORT SULPHUR COMPANY

TABLE 3.—*Ratios of Costs, Expenses, and Profits to Net Sales, Expressed in Cents per Dollar of Net Sales, 1919-1938*

Year	Costs and Expenses	Net Profit on Sales	Miscellaneous Income	Net Income before Federal Income Taxes	Provision for Federal Income and Profits Taxes	Net Income
1919.....	69.40	30.60	3.74	34.34	2.29	32.05
1920.....	77.24	22.76	11.67	21.09	3.78	17.31
1921.....	100.05	1.05	5.46	15.51	3.16	18.67
1922.....	102.67	2.67	.38	12.29	1.21	13.50
1923.....	83.67	16.03	.57	16.60	1.84	14.76
1924.....	97.05	2.95	.39	3.34	5.01	11.67
1925.....	11.44	.89	.89	12.33	1.95	10.38
1926.....	88.56	19.64	.73	20.37	1.17	19.20
1927.....	80.36	28.28	2.11	30.39	2.44	27.95
1928.....	71.72	26.77	.90	27.67	2.80	24.87
1929.....	73.23	30.69	.95	31.64	3.96	27.68
1930.....	69.31	26.83	.58	27.41	2.64	24.77
1931.....	73.17	26.83	1.15	28.16	2.76	25.40
1932.....	71.69	28.31	.30	31.66	3.21	28.45
1933.....	68.64	31.36	.45	31.85	2.70	29.15
1934.....	68.60	31.40	2.01	20.34	1.85	18.49
1935.....	82.27	17.73	.49	18.56	1.69	16.87
1936.....	81.93	18.07	.82	22.62	2.61	20.01
1937.....	78.20	21.80	.24	22.92	2.13	20.79
1938.....	77.32	22.68	1.43	18.57	1.83	16.74
1938.....	81.00	19.00				
Average.....	77.54	22.46	.62	23.08	2.55	20.53

1 Denotes loss.

The following exhibit, introduced during hearings held July 14, 1939, is included at this point in connection with testimony contained in this volume.

EXHIBIT No 389-A

LANGBOURNE M. WILLIAMS, JR.
President

FREEMPORT SULPHUR COMPANY,
122 East 42nd Street, New York, April 21, 1939.

Colonel WILLIAM T. CHANTLAND,
Federal Trade Commission, Washington, D. C.

DEAR COLONEL CHANTLAND: I have incorporated in the letter to Mr. Henderson the changes we agreed upon in your office on Monday, and I am sending the original and two copies to you herewith. I appreciate very much indeed your kindness in offering to forward this letter to the Temporary National Economic Committee and joining with me in the request that it be published as a part of the formal record of the Committee.

Although I have mentioned in conversation with you both your letter of March 14 and your letter of April 4, I find that I have not formally acknowledged these letters, and I therefore do so herewith, with thanks.

Assuring you of my appreciation of your courtesy and cooperation,
Faithfully yours,

LANGBOURNE M. WILLIAMS, JR.,

LMW:mm

LANGBOURNE M. WILLIAMS, JR.
President

FREEMPORT SULPHUR COMPANY,
122 East 42nd Street, New York, April 21, 1939.

Mr. LEON HENDERSON,
Executive Secretary, The Temporary National
Economic Committee, Apex Building, Washington, D. C.

DEAR MR. HENDERSON: Following my discussion with you on the subject of the presentation of the sulphur industry to The Temporary National Economic Committee I saw Colonel William T. Chantland of the Federal Trade Commission as suggested, and submitted to him certain information which he wished. At that time I raised the question of the possible desirability of our making comments on certain parts of the testimony introduced and he was good enough to say that I might write a letter to you which would be published as a part of the record of the hearings before the Committee. I am very sorry to say that in the statements made to the Committee there were a number of errors which seem to me too serious to go uncorrected. I am commenting on a number of them in this letter, and I am appending a list of the sources from which the more important statements made in this letter have been drawn. I shall appreciate it very much if you will arrange for this letter to be published as a part of the formal record of the Committee.

There is so much seeming confusion indicated in the record on the subject of sulphur that I wish to commence with a reminder that sulphur is one of the ninety-two elements. It is a very common element and occurs in many different forms. The form in which it is produced by the American Gulf Coast producers is only one of its many forms, and although this form accounts at the present time for a large part of the sulphur consumed in the United States, it is by no means the most important in terms of world consumption. The form in which sulphur most commonly occurs is as pyrites—sulphides generally containing from 40% to 48% sulphur and combined with iron and copper. Pyrites is produced in twenty-three countries, the great Rio Tinto mines of Spain being an example. Pyrites is principally used directly in the manufacture of sulphuric acid and in the paper trade, but in some instances the sulphur contained in pyrites is extracted and sold as crude sulphur.¹ Pyrites accounted for about 52% of the total quantity of sulphur consumed in the world in 1937.

The next most important source of sulphur is native sulphur,¹ which is produced from naturally occurring ores containing elemental sulphur. Native sulphur is produced in fifteen countries; the largest producer is the United States and the

¹ In this letter the terms "crude sulphur" and "brimstone" are used interchangeably to refer to (a) native sulphur, (b) sulphur extracted from pyrites, and (c) sulphur recovered from gases. They do not refer to sulphur used in the form of pyrites or in the form of gases.

next largest are Italy and Japan. In 1937 native sulphur accounted for 37% of the total quantity of sulphur consumed in the world.

The third largest source of sulphur is copper and zinc smelter gases. Such gases are used in large amounts for the production of sulphuric acid, but in some instances the sulphur itself is recovered and sold as crude sulphur.¹ Smelter gases accounted for about 9% of the total quantity of sulphur consumed in the world in 1937.

Other sources of sulphur are gases from coke, coal, and lignite. Sulphur is being manufactured in Germany today by new processes using these sources. Petroleum refineries in the United States are another source of sulphur, the sulphur gases being captured in the refining process and manufactured into sulphuric acid.

It is important to emphasize that enormous quantities of sulphur derived from these various sources enter into the manufacture of sulphuric acid, sulphur dioxide, and other combinations and are used in many of the important industries of the world including fertilizer, pulp and paper, and steel.

When the subject of sulphur was first introduced at the hearing the statement was made that "the United States produces over half the sulphur of the world," and that "the workable deposits are limited and are in two States only, Texas and Louisiana, and except for a few years and until very recently, the supply has been furnished by two companies from generally not over half a dozen mines." This statement presumably referred to brimstone, but we have already seen that brimstone is only one of many forms in which sulphur is used and that, in terms of world consumption, it is not even the most important of the several sources of sulphur. The fact is that while the mines in Texas and Louisiana produce a large part of the sulphur consumed in the United States, they produce only 28 % of the total sulphur consumed in the world. We believe, therefore, that this introductory statement gave an incomplete and unfortunate background for the story of sulphur.

The Federal Trade Commission presented as an expert witness on sulphur, Dr. Robert H. Montgomery, Professor of Economics at the University of Texas. I am very sorry to have to say that—probably due to the pressure of time—a number of the statements made were either incorrect or misleading. Thus, although tables were presented in the testimony showing that pyrites and gases are important sources of sulphur, the testimony often completely ignored these forms of sulphur.

It was stated, for example, that since 1906 our sulphur imports have dropped "to zero, or almost zero, where they have remained during the past thirty-two years." We do not believe a study of the competitive position of sulphur can afford to disregard the effect of sulphur imported in the form of pyrites. During the period 1906-1938 pyrites imports alone amounted to more than 17,900,000 tons, equivalent to more than 8,000,000 tons of crude sulphur for the period or an average of about 240,000 tons of crude sulphur per year. The importance of pyrites as a competitive source of sulphur is also attested by the fact that in the year 1937, for example, American industry consumed over 580,000 tons of domestic pyrites and over 520,000 tons of imported pyrites, equivalent to more than 465,000 tons of crude sulphur (out of a total American sulphur consumption equivalent to about 2,300,000 tons of crude sulphur).

At another point, it was stated that "we have supplied approximately 75% of the world market outside of the North American continent." Even if the reference was to brimstone only and not to the whole sulphur market the statement was incorrect because the *United States Gulf Coast producers supply only 30% of the world market for crude sulphur outside of the North American continent* (1937 figures).

FOREIGN MARKET

The foreign market occupied a large part of the hearing before the committee. As was stated at the hearing, the Sulphur Export Corporation was organized in 1922 pursuant to the Webb-Pomerene Act, which had been enacted in 1918 and was designed to promote the export trade of domestic producers. We regret to find that the Committee was not correctly informed as to the activities of this corporation and the purposes it was organized to accomplish and has in fact fulfilled. After testimony had been received concerning the formation of Sulphur Export Corporation, it was stated that this corporation had entered into an agreement with the Sicilian producers and that under this agreement the North American continent and the outlying islands were "retained for the American producers exclusively." Dr. Lubin asked whether it was correct that certain markets had been reserved for the American producers and certain markets for the Italian producers, and the reply was made that that was correct. That was not correct.

¹ See footnote 1 on preceding page.

The agreement to which the witness referred was presumably the agreement made on March 14, 1923 between Sulphur Export Corporation and the Consorzio Obbligatorio per l'Industria Solifera Siciliana, a compulsory association of all the Sicilian sulphur producers which had been created by Italian law in 1906. A copy of this agreement is enclosed herewith. *This agreement reserved no markets for either party.* It provided that there should be divided between the two parties, in certain proportions, the total sales made by the parties except sales made in (1) the Kingdom of Italy, its dependencies and its colonial possessions and (2) North America, Cuba, the islands off the coast of Canada and the insular possessions of the United States; there was nothing in the agreement which, either expressly or by implication, prevented either party from making its sales *anywhere in the world.*

The Consorzio was subsequently dissolved by decree of the Italian government. Thereafter that government, by decree made in 1933, created the Ufficio per la Vendita dello Zolfo Italiano, a compulsory sales office for all Italian crude sulphur. On August 1, 1934 Sulphur Export Corporation entered into an agreement with the Ufficio. *This agreement likewise reserved no markets for either party.* Like the earlier agreement with the Consorzio, it provided for a division of the total sales made by the two parties except sales made in the territories above mentioned; here, again, there was nothing in the agreement which, either expressly or by implication, prevented either party from making its sales *anywhere in the world.*

In order that there may be no misunderstanding on the part of the Committee, we think it pertinent to point out (1) That Sulphur Export Corporation has rendered annual reports to the Federal Trade Commission during each year of its existence; (2) that it has, in addition, submitted a considerable number of interim reports of various kinds; (3) that the agreement between Sulphur Export Corporation and the Ufficio dated August 1, 1934, the letter addressed to Duval Texas Sulphur Company under date of October 9, 1934 and relating to foreign sales (Exhibit No. 384), the letter addressed to Orkla under date of October 9, 1934 and relating to foreign sales (Exhibit No. 384), the letter addressed to Duval Texas Sulphur Company under date of August 24, 1934 and relating to foreign sales (Exhibit No. 384), and the letter addressed to Jefferson Lake Oil Company under date of June 8, 1934 and relating to foreign sales (Exhibit No. 385) were all submitted to the Federal Trade Commission in the annual report forwarded to the Commission on December 18, 1934 and acknowledged on the following day; (4) that the agreement with Orkla dated April 1, 1936 (Exhibit No. 387) was submitted in an annual report forwarded to the Commission on December 19, 1936 and acknowledged two days later; and (5) that at no time has the Federal Trade Commission suggested that any of these letters or agreements failed in any respect to comply fully with the law.

The necessity for granting to American exporters the advantages provided by the Webb-Pomerene Act is readily demonstrated by the conditions under which American producers are obliged to compete in foreign markets. Whereas sulphur and pyrites both enter this country free of duty, the world market is distinctly not one of free trade. A study which we recently made revealed, for example, (1) that by royal decree of December 11, 1933, the Italian Government had created a sulphur subsidy of 20,000,000 lire (\$1,600,000, at the then prevailing rate of exchange) to be spent during 1934 and the first half of 1935, and that by royal decree of June 27, 1935, the government subsidy had been extended through 1937 and there had been provided an additional annual appropriation of 30,000,000 lire (\$2,400,000, at the then prevailing rate of exchange) to meet any difference between the minimum price guaranteed by the Italian Government to its crude-sulphur producers and the sales prices realized in world markets; (2) that Japan, ranking third among the world producers of crude sulphur had protected its market for Japanese producers by imposing a 20% duty on the c. i. f. value of imported crude sulphur; (3) that Spain (the principal source of pyrites imported into the United States), which had previously had a duty of 4 gold pesetas on imports of crude sulphur, had, on April 17, 1934, prohibited all imports of crude sulphur into Spain; (4) that in Chile a law enacted April 20, 1932, had authorized the government to pay a subsidy of 30 pesos per ton of sulphur ore exported from Chile; (5) that Portugal, where production of sulphur from pyrites ore had been commenced in 1934, imposed a duty of .8 gold escudos per 1,000 kilos plus an import surtax of 20%; and (6) that the Outokumpu pyrites mine, owned and operated by the Finnish government, had displaced approximately 40,000 tons of crude sulphur in the world markets. Competitive conditions such as these are ample evidence of the need for permitting American industry to present a united front in the foreign markets.

The Webb-Pomerene Act, like one phase of the more recent reciprocal-trade-agreements program, was adopted for the purpose of stimulating the sale of American products in international trade. The problem of promoting exports has become a difficult one in these days of totalitarian governments. Germany, for example, formerly imported large quantities of crude sulphur from the United States. Recently, German concerns, under direction of the German government have undertaken large-scale extraction of crude sulphur from manufactured gases and have not only succeeded in supplying a large portion of their own requirements but are now considering the expansion of their operations to permit exportation. In the United States, government and business alike have stressed the importance of promoting international trade both as a means of achieving prosperity and as a way of assuring peace among nations. The Department of Commerce has recently submitted a questionnaire to associations organized under the Webb-Pomerene Act and is presumably endeavoring to ascertain whether trade-export corporations formed under that Act have effectively served the purposes for which they were formed. We believe it will be found in this instance that Sulphur Export Corporation has performed a very real service to American export trade in assuing a reasonable outlet for American products.

BRIMSTONE AND THE DOMESTIC ECONOMY

In considering the relation of crude sulphur to industry and agriculture it is natural to turn first to sulphuric acid (five pounds of 50° Baumé acid being produced from one pound of crude sulphur). Dr. Montgomery at the outset of his testimony, quoted Mr. Kreps as the author of a statement that sulphuric acid is "the most basic of all chemical products." He then proceeded to add his own observation that "sulphuric acid, I believe, is the narrowest and at the same time most vital bottle neck of modern industry." Reference to a bottle neck would seem to imply obstruction to free passage, to expansion, to smooth operation, perhaps to efficient and economical operation in general. The use of the term here would seem to mean that the free use of sulphuric acid is impeded and thus constitutes an obstruction to the operation of industry.

That Dr. Montgomery was voicing his own views and not those of Mr. Kreps is abundantly demonstrated in the latter's book "The Economics of the Sulfuric Acid Industry." At page 30 he states:

"The sulfuric-acid industry illustrates par excellence practically all of the characteristic features of the chemical phase of the Industrial Revolution. *It has shown amazing growth in the quantities produced with ever lowering costs and lower prices.*" [Italics supplied.]

and at page 44 he states:

"Thus today the sulfuric-acid industry in the United States is far larger than that of any other country in the world, furnishing unmistakable evidence of the vitality and varied development of our chemical enterprise. Because its products are so cheap and so widely used, the sulfuric-acid industry can fairly be said to have played an indispensable part in making the chemical industries of the United States strong. *It is the basic industry the strength of which has enabled the American chemical industry to compete vigorously in, if not to dominate, some of the most important chemical markets in the world.*" [Italics supplied.]

In support of the view of Mr. Kreps it may be mentioned (1) that sulphuric acid can be purchased at about $\frac{1}{2}$ ¢ per pound at the producing plants, (2) that at no time since the war has there been an actual shortage either of ample stocks or of productive capacity, (3) that whereas sulphuric-acid production in the United States amounted to 3,575,000 tons the year before the war, it had grown to 9,000,000 tons by 1937, and (4) that since 1927 there have been constructed in the United States no less than twenty-two new plants having an annual productive capacity of 1,410,000 tons of sulphuric acid.

From 1929 to 1937 the rayon, film, paints and pigments industries have increased their consumption of sulphuric acid 530,000 tons, or 140%, more than offsetting the 23% decline in consumption in the petroleum industry, amounting to 360,000 tons over the same period. The fertilizer industry, the largest single user of sulphuric acid in 1937 increased its consumption 6% over 1929, and for all uses the total consumption of sulphuric acid increased from 8,338,000 tons in 1929 to 8,763,000 tons in 1937, or a gain of 5%. In 1929, when the Federal Reserve Board Index of Manufacturing in Production was 117 based on the 1923-1925 normal, sulphuric acid production was 127. At the bottom of the depression, in 1932, general industry stood at 62, sulphuric acid at 67; and when in 1937 the index of manufacturing had risen to 109, the acid production index had risen to

133. We wonder whether many other industries have equalled this record of serviceability, flexibility, and expansibility.

In making a study of any raw material in its relation to industry, to agriculture, and to the public in general, it is natural to inquire in what measure it is contained in the finished product and to what extent its cost affects the price of the finished product. The Chairman (Senator O'Mahoney) appropriately asked whether it was not the fact that, so far as its commercial use was concerned, the sulphur content of commodities which were put upon the general market was comparatively small. Dr. Montgomery answered that it depended upon the commodity. The Chairman then suggested *fertilizer* as an example, and the witness proceeded to testify about superphosphate fertilizer. He stated that in making superphosphate fertilizer 900 pounds of sulphuric acid are added to 1,000 pounds of phosphate rock. Colonel Chantland then asked about the comparative costs of the two ingredients, the phosphate rock and the sulphuric acid. Dr. Montgomery replied that "of course, phosphate rock is very, very cheap if stated in terms of tonnage, as contrasted with sulphuric acid."

This testimony incorrectly indicated that the price paid by the farmer for at least one kind of fertilizer was due in largest part to the cost of sulphur. The witness stated that "the phosphate rock sold on an average last year at \$3.28 per ton." This is the price per long ton f. o. b. mines, and accordingly the 1,000 pounds of phosphate rock mentioned by the witness would cost \$1.46 at the mine. In order to produce the 900 pounds of sulphuric acid mentioned by the witness, 187 pounds of crude sulphur would be required. This amount (at the present market price of \$16.00 per long ton f. o. b. mines) would cost \$1.34 at the mine. At the present sales price for superphosphate of \$8.00 per ton the cost of the phosphate rock entering into its production is 19.5% of the market value, whereas the cost of the sulphur represents 17.9% of such value. *Accordingly, the price of superphosphate fertilizer is even less attributable to the cost of sulphur than to the cost of the "very, very cheap" phosphate rock.*

Moreover, virtually all superphosphate is used in the form of *mixed fertilizers*. The most commonly used fertilizer in this country is a 3-8-3 mixture (the numbers referring respectively to the nitrogen, phosphate, and potash contents). The total sulphur requirement amounts to 174 pounds per ton of 3-8-3 fertilizer. As above stated, the present price for sulphur is \$16.00 per long ton f. o. b. mines and accordingly 174 pounds of sulphur would cost \$1.24. At the present sales price of \$17.00 per ton for 3-8-3 fertilizer the cost of the sulphur entering into its production represents 7.3% of the market value.

The Chairman went straight to the heart of the matter when he suggested that, although sulphur enters into a very wide range of commodities, the sulphur content of such commodities "is comparatively small." The slight degree to which sulphur enters into the final product in representative industries is indicated by the fact that the cost of the crude sulphur used in the production of the final product represents about 1% of the market value in the case of *paper*, 2% in the case of *rayon*, about $\frac{1}{100}$ of 1% in the case of *rubber*, about $\frac{1}{10}$ of 1% in the case of *petroleum*, less than $\frac{1}{3}$ of 1% in the case of *steel*, and about 2% in the case of *paint*.

The record abundantly demonstrates that this product is as cheap and available as it is necessary and useful, and has opened up broad highways of expansion and development. To quote the authority cited by Dr. Montgomery, Mr. Kreps states at page 75 of the work previously mentioned:

"But in the chemical industry there is a competition among raw materials which causes the industry or industries using them to change their processes of production. It often influences profoundly, if indeed it does not determine, the competitive success not only of processes but even of the industry itself. In short, so far as the sulfuric-acid industry is concerned, no record or explanation of the success of the contact process, or even of the growth of the industry itself to a position of world leadership, can pretend to be complete which does not give considerable space to the competition among the industries furnishing the raw materials. It may be, for example, that the success of the contact process and the enormous burst of oleum production, and even some of the success in the production of dyestuffs, nitrocellulose lacquers, and the like, *may be due in no small degree to the amazing development of the sulfur industry in the United States.* [Italics supplied.]

COMPETITION AND MONOPOLY

Turning to the field of domestic competition, the testimony implied that there had been an effort to monopolize the market by making disproportionate acquisitions of potential sulphur properties. It was stated that sulphur is found in its

natural state in salt domes; that "there seems to be some sixty or seventy of those on the Gulf Coast"; and that the present producing companies own "between 35 and 45" of these domes.

In the Gulf Coast region more than 136 salt domes have been proven by drilling, and a considerable number of additional salt domes have been indicated by geophysical surveys. *This company owns no interest, direct or indirect, in any sulphur property except the two which it operates, Hoskins Mound in Texas and Grande Ecaille in Louisiana.*

Equally unfounded, so far as Freeport Sulphur Company is concerned, was the reference to the operations of Duval Texas Sulphur Company and Jefferson Lake Oil Company, wherein it was stated that "the two major companies have some sort of relationship at least to the two minor companies on all of their producing plants." The fact is that *Freeport Sulphur Company has no interest whatsoever in any of the properties from which either Duval Texas Sulphur Company or Jefferson Lake Oil Company is producing sulphur.*

Dr. Montgomery made the statement, "The industry has been closely monopolized for approximately 42 years." We may test the validity of this assertion by ascertaining whether new companies have been able to enter the field and to sell their product. Forty-two years ago the Gulf Coast sulphur industry did not exist. In 1903 the Union Sulphur Company secured the first American production of brimstone on a commercial scale, and thus the United States became for the first time independent of foreign production. In 1912 the Freeport Sulphur Company commenced production at Bryan Mound, Brazoria County, Texas, and, as soon as production reached a commercial basis, began marketing sulphur in large quantities. In 1919 the Texas Gulf Sulphur Company commenced the production of sulphur at Big Hill, Matagorda County, Texas, and immediately began to market very substantial quantities. In 1928 the Duval Texas Sulphur Company commenced production at Palangana dome, Texas. It produced at this property from 1928 until 1935, when the property was exhausted, and during that period it shipped its entire production. In 1932 Jefferson Lake Oil Company commenced the production of sulphur at Lake Peigneur, Louisiana. It produced at this property from 1932 until 1936, when the property was exhausted, and before the end of 1937 it had shipped all of the sulphur produced. Notwithstanding such exhaustion of their reserves, both Duval Texas Sulphur Company and Jefferson Lake Oil Company acquired other properties and both are now producing and shipping substantial amounts of sulphur. As this recital demonstrates, the sulphur industry has been anything but a closed one; on the contrary, any prospector fortunate enough to find a substantial deposit has also found an immediate market for his product.

The testimony not only incorrectly implied excessive control of properties; it also implied an abnormal control of prices. Many references were made to the fact that the price of sulphur advanced after the formation of Sulphur Export Corporation in 1922, and the definite inference was drawn that the formation of Sulphur Export Corporation was a device used to permit American producers to fix the price of sulphur in the domestic markets.

In this connection, a question was asked as to what had happened to the price of sulphur when the export agreement was made. The reply was made that "the price of sulphur, which had declined very sharply, was raised to approximately \$18.00 per ton f. o. b. the mines." The export agreement, it will be recalled, was made in 1922. Our records show that, so far as Freeport Sulphur Company was concerned, the price of sulphur f. o. b. mines did not reach \$18.00 until 1926.

I did not become connected with the management of this company until 1930, and no present officer or director of this company was an officer or director of the company in 1922. We have, however, studied the history of the industry, and there are certain factors which it seems to me should be presented as throwing important light on the picture presented to the Committee.

In 1922 the Freeport Sulphur Company was operating one mine, Bryanmound, at which it began the production of sulphur in 1912. At the end of 1922 Bryanmound was considered to be approaching exhaustion. In 1922 a lease was obtained from The Texas Company (oil company) for the operation of Hoskins Mound, and in 1923 sulphur production commenced at this mine. Very serious operating difficulties were encountered, and it was not until 1925 that satisfactory production was secured. Because of these facts there was obviously serious doubt as to whether these two mines could be counted on as a substantial source of sulphur. *This company lost money in 1921, 1922, and 1924.*

Moreover, at the end of 1924 Union Sulphur Company, the first sulphur company in the United States to produce sulphur by the Frasch process, discontinued mining operations. Thus, aside from the two doubtful Freeport mines, there was

left only one substantial producing property, Big Hill in Matagorda County, Texas, which was operated by the Texas Gulf Sulphur Company and which has since been depleted and abandoned.

It will be remembered that following the economic depression of the early twenties a substantial business recovery took place in the United States. According to Exhibit No. 374 of the testimony presented to the Committee, United States shipments of sulphur increased from 954,000 tons in 1921 to—

1,344,000 tons in 1922
1,619,000 tons in 1923
1,537,000 tons in 1924
1,858,000 tons in 1925
2,073,000 tons in 1926

According to Bureau of Mines figures total production for all the American Gulf Coast producers in 1924 was 1,221,000 tons, whereas shipments amounted to 1,537,000 tons. In 1925 production was 1,409,000 tons and shipments were 1,858,000 tons. In 1926 production was 1,890,000 tons and shipments were 2,073,000 tons. Under such circumstances of strong demand and lagging production, is it a necessarily strange and evil thing that there was an increase in the price of sulphur from 1922 to 1926?

As I have already stated, I did not become connected with the management of Freeport Sulphur Company until 1930, nor did I have any association with Sulphur Export Corporation prior to that time. I am, however, able to state of my own knowledge that Sulphur-Export Corporation has never, during the time of my connection with it, been used directly or indirectly to fix the price of sulphur in the domestic markets.

Finally reference was made to supposed "excess production." The following colloquy took place:

"Mr. BALLINGER. Now from 1925 to 1938 wasn't there considerable excess production in the sulphur industry?"

"Dr. MONTGOMERY. At least there has been *a much larger production per year than the companies were able to sell.*" [Italics supplied.]

The fact of the matter is that the total amount of crude sulphur produced in the United States between January 1, 1925 and January 1, 1938 amounted to 24,551,954 tons, while total shipments during the same period were 24,319,754 tons. In other words, production exceeded shipments by less than 1 percent. Moreover, total shipments exceeded total production in no less than 8 of the years in the period 1925-1938.

COSTS AND PROFITS

The portion of the record relating to costs and profits presents a misleading picture due to serious errors in computation.

There was received in evidence (Exhibit No. 389) a report entitled: "Federal Trade Commission, Financial Report, Including Investments, Profits, and Rates of Return for Freeport Sulphur Company." Taking as a basis for his observations Table No. 2 of this report, Dr. Montgomery concluded that the average selling price of sulphur during the period of twenty years from 1919 to 1938 had amounted to \$18.10 per ton. This figure he obtained by dividing total "sales" by the total tons of sulphur sold during the period. The "sales" total thus used amounted to over \$174,000,000. The company, however, had previously advised the accountant for the Commission that *total sales included sales of commodities and services other than sulphur* (asphalt, oil, transportation, light, water, ice, etc.), and that the average selling price of sulphur could not be obtained by dividing this total by the tonnage sold. The amounts of these other sales for the period in question aggregated *more than \$15,500,000* and these items must, of course, be excluded. When this correction is made, it appears that the average selling price of sulphur amounted, not to \$18.10 per ton, but to \$16.48 per ton.

The witness then undertook to project some remarkable figures of his own. He gave the following hypothetical case:

"If this company should stop production as of January 1, 1939, and should sell out its stock of sulphur above ground at its average price of the past 20 years and at the average general selling and administrative expenses of \$1.57 per ton, the net profits on sales would be increased by \$15,881,790. This would indicate a net profit on sales of \$5.27 per ton."

This result is arrived at (1) by assuming the sale of 960,000 tons of sulphur at \$18.10 per ton (even though the price of sulphur has been \$16.00 per ton since last fall), (2) by assuming that the entire cost of this sulphur had already been

deducted in computing the profit on the sulphur previously sold (an assumption completely without justification), and (3) by assuming that the profit on the transaction can be determined by taking the supposed selling price and deducting merely \$1.57 for administrative, selling, and general expenses, thus arriving at a net profit of \$16.53 per ton for this stock on hand. The fact of the matter is that even assuming that the entire inventory on hand on December 31, 1938, could be sold, the hypothetical increase in net profits would be determined by multiplying the tonnage in inventory by a profit of approximately \$3.00 per ton rather than by a supposed profit of \$16.53 per ton.

In this connection, Exhibit No. 376 purports to show the cost of production of Freeport Sulphur Company for the period 1927-1937. The figures set forth do not include the large royalties which Freeport Sulphur Company is obligated to pay to its immediate lessors under its sulphur leases and which constitute an important and inescapable part of its costs. Whereas Exhibit No. 376 reflects supposed production costs of approximately \$6.00 per ton, the average cost of goods sold by this company (including royalties) during the period mentioned amounted to \$11.78. This figure must be deducted from net sales in order to determine gross profit and there must then be deducted administrative, selling, and general expense and other items such as prospecting expenses and federal and state income and profits taxes in order to determine the final net profit. These additional deductions amounted, for the period mentioned, to \$2.02 per ton, and left a final net profit, for the same period, of \$3.78 per ton. The net profit in 1938 was less than \$3.00 per ton.

The report received in evidence (Exhibit No. 389) purported to show, moreover, that during the twenty-year period 1919-1938 the company had received an average return of 16.23% on its invested capital. Colonel Chantland stated in offering the report that it had been submitted to the company for checking and that the Commission had had "no word back from the Freeport Company of having completed their checking." The company had, however, advised the Commission's accountant by telephone that although the report had not yet been fully checked (it was received the day before the hearing), it had been checked sufficiently to indicate that the computation of return on invested capital was, in the opinion of the company, erroneous. The company has since received from the Commission a memorandum explaining the method of computation used.

In the first place, there was excluded a total of \$4,600,000 as representing *corporate income and profits taxes*. This action we believe to be unjustified, for it seems to us that what the Committee is endeavoring to ascertain is the return to the people who invest their money in this kind of industry or, in other words, the amount of earnings available for dividends. But even on the theory advanced in the memorandum, there was manifest error, for the figure thus excluded contained over \$1,700,000 representing *property taxes*, which should clearly have been included on any theory. Secondly, there were excluded *all prospecting expenses, amounting to \$2,800,000*, and the reasons given were (1) that these items had not been consistently treated on the books of the company, (2) that they were in the nature of extraordinary charges of varying amounts and to have included the amounts as deductions from income would have distorted the yearly comparisons of operations and returns on investment, and (3) that although no doubt some portion of the aggregate amount applied to the income for the period the authors of the report did not "know of any equitable basis for amortizing the charges to operations in order to determine the amount applicable to the period or to any year within the period." In other words, merely because in the time available the authors did not know how to *allocate* the expenses equitably for the period, they omitted them and set forth for the guidance of the Committee supposed annual rates of return notwithstanding the fact that they clearly recognized that "no doubt some portion of the aggregate amount applies to the income for the period." Next, *there were eliminated surplus deductions (largely depreciation adjustments) and capital losses amounting to \$1,900,000*, although the entire amount, under proper accounting procedure, operated to reduce the amount of earnings available for dividends. Finally, there occurred an even more serious error, which I shall mention in a moment.

If all these errors are corrected, the corrected figures produce an average annual rate of return not of 16.23%, but of 12.28%.

Finally, a climax was reached when Mr. Ballinger asked:

"What do you think of a company, the Freeport Company, that in 1931 can make 34 percent return on its invested capital? Doesn't that indicate to you the absence of competition?"

This figure of 34% was arrived at, not only by making the improper exclusions previously mentioned, but also by means of an obvious error. In Table No. 2,

Net Income before Federal Taxes for 1931 was stated at \$2,635,343. When net income before federal taxes for this year was shown in Table No. 1, it was stated at \$3,635,343—thus increasing the figure by exactly \$1,000,000 and producing the supposed return of 34%. If these errors are corrected, the rate of return becomes, not 34% but 18.51%.

Had the errors in the record been insignificant in character we should have preferred to make no statement and, indeed, we have left unmentioned a very considerable number of additional mistakes. But the errors were not insignificant; on the contrary, they could not have failed to be misleading—and seriously misleading—on every important point. We know that it is the purpose of the Committee, in its search for solutions for the complex problems confronting this country, to procure an accurate presentation of the industries which are the subject of its study, and we believe the statement contained in this letter is in furtherance of that purpose. In the interest of the Committee, therefore, as well as in our own interest, we respectfully ask that this statement be made a part of the record.

Faithfully yours,

LANGBOURNE M. WILLIAMS, JR.,
President.

LMW Jr:ML
Att.

LIST OF SOURCES OF CERTAIN STATEMENTS MADE IN LETTER FROM LANGBOURNE M. WILLIAMS, JR., PRESIDENT OF FREEPORT SULPHUR COMPANY, TO LEON HENDERSON, EXECUTIVE SECRETARY OF THE TEMPORARY NATIONAL ECONOMIC COMMITTEE, DATED APRIL 21, 1939

The following table contains a series of estimates compiled by the Statistics Department of Freeport Sulphur Company from various data and sets forth the indicated sources of the apparent world consumption of sulphur in 1937. The figures set forth represent long tons of equivalent sulphur.

	Pyrites	Native sulphur		Smelter gases	Manufactured gases	Petroleum gases
		Frasch process	Other sources			
Algeria.....	12,466					
Australia.....	40,000					
Belgium.....				110,000	3,209	
Bolivia.....			2,000			
Canada.....	54,595			64,167		
Chile.....			27,598			
China and Chosen.....	6,000		3,000			
Cyprus.....	182,000					
Finland.....	41,000					
France.....	67,000			45,000		
Germany.....	182,000			110,000	45,000	
Great Britain.....				140,000	79,000	
Greece.....	100,000		3,000			
Italy.....	424,000		472,274			
Japan.....	900,000		240,000	70,000		
Java.....			12,400			
Jugoslavia.....	68,000					
Mexico.....			150			
Norway.....	455,593					
Poland.....	34,000			50,000		
Portugal.....	297,021					
Russia.....	300,000		30,000			
Spain.....	1,077,489					
Sweden.....	74,000			17,359		
Southern Rhodesia.....	8,000					
Turkey.....			2,721			
United States.....	235,520	2,454,831	7,060	180,000	12,000	20,000
Union of South Africa.....	12,000					
Others.....	29,000		3,965			
Total.....	4,590,684	2,454,831	804,168	786,526	139,209	20,000
World total, 8,804,418.....						
Percent of world total.....	52.3	27.9	9.1	8.9	1.6	0.0

1. Page 2. Pyrites accounted for about 52 percent of the total quantity of sulphur consumed in the world in 1937. See above table.

2. Page 2. In 1937 native sulphur accounted for 37 percent of the total quantity of sulphur consumed in the world. See above table.

3. Page 2. Smelter gases accounted for about 9 percent of the total quantity of sulphur consumed in 1937. See above table.

4. Page 3. The mines in Texas and Louisiana produce about 28 percent of the world's total sulphur. See above table.

5. Page 4. During the period 1906-1938 pyrites imports amounted to more than 17,900,000 tons. U. S. Bureau of Mines, Minerals Yearbooks 1911-1937. The statement that this tonnage is equivalent to more than 8,000,000 tons of crude sulphur is calculated from the pyrites figure of 17,900,000 tons by using an average sulphur content of 45 percent.

6. Page 4. In 1937 American industry consumed over 580,000 tons of domestic pyrites and over 520,000 tons of imported pyrites, a total equivalent to more than 465,000 tons of crude sulphur. U. S. Bureau of Mines, Minerals Yearbook 1938. The crude sulphur equivalent is obtained by using an average sulphur content of 45 percent for imported pyrites and an average sulphur content of 40 percent for domestic pyrites.

7. Page 4. In 1937 American sulphur consumption was equivalent to about 2,300,000 tons of crude sulphur.

United States consumption of sulphur from all sources in 1937

	Equivalent sulphur, long tons	Percent distribution
1. Mined Sulphur, Gulf Coast.....	1,650,000	71.7
2. Mined Sulphur, Utah, California.....	7,000	0.3
3. Imported Pyrites, 472,000 Tons at 48% sulphur.....	226,000	9.8
4. Domestic Pyrites, 526,000 Tons at 40% sulphur.....	210,000	9.1
5. By-Product Smelter Acid, 834,000 Tons, 60° acid.....	183,000	7.9
6. Hydrogen Sulphide from Petroleum Refinery Gases.....	20,000	0.9
7. By-Product Sulphur from Manufactured Gases.....	6,000	0.3
Total.....	2,302,000	100.0

REFERENCES

1, 3, 4, 5: Chemical & Metallurgical Engineering—Feb. 1939.

2: Minerals Yearbook, 1938.

6, 7: From reported sizes of operating installation. No actual data published.

8. Page 4. The United States Gulf Coast producers supply only 30 percent of the world market for crude sulphur outside of the North American Continent. Calculated from data in table on page (1) and from export data published by the U. S. Bureau of Mines.

9. Page 9. Sulphuric acid production in the United States amounted to 3,575,000 tons the year before the War. Bulletin 184, U. S. Department of Interior, Page 6.

10. Page 9. Sulphuric acid production in the United States had grown to 9,000,000 tons by 1937. "Chemical and Metallurgical Engineering," February 1939, Page 107.

11. Page 9. Since 1927 there have been constructed in the United States twenty-two new plants having an annual productive capacity of 1,410,000 tons of sulphuric acid. Data primarily from Fairlie's "Sulphuric Acid Manufacture," Reinhold Publishing Company, 1936. More recent data from various publications.

12. Page 9. Consumption of sulphuric acid in the rayon, film, paints, and pigments industries increased by 530,000 tons during the period from 1929 to 1937, while during the same period consumption of sulphuric acid in the petroleum industry declined 360,000 tons. During the same period the fertilizer industry increased its consumption 6 percent, and for all uses the total consumption of sulphuric acid increased from 8,338,000 tons to 8,763,000 tons. Annual statistics published in "Chemical and Metallurgical Engineering."

13. Page 10. Sulphuric acid as an element in the cost of superphosphate fertilizer. The witness stated that "the phosphate rock sold on an average last year at \$3.28 per ton." The price quoted is the price per long ton f. o. b. mines.

Since virtually all of the superphosphate fertilizer is made at plants producing sulphuric acid, any comparison between the cost of the phosphate rock and the cost of the acid must be made by comparing the cost of the phosphate rock delivered at the acid plant with the cost of the acid produced at that plant. Our estimates indicate that the average cost of 1,000 pounds of phosphate rock delivered at the acid plant is \$2.81 and that the average cost of producing 900 pounds of acid from crude sulphur delivered at the same point is \$2.70. If the cost of phosphate rock may be described as very, very cheap, then certainly at least as much must be said for the cost of sulphuric acid. In the foregoing statement delivered cost of phosphate rock is based on an average freight and handling cost for phosphate rock from Florida to Southeastern producing plants of \$3.00 per long ton, as contained in book entitled "Ground Phosphate Rock" published by American Cyanamid Company. Estimate of average cost of producing sulphuric acid is based on data from various sources and information from responsible consultants. Average production cost estimated at \$6.00 per short ton of 50° Baumé acid.

14. Page 10. Present sales price for superphosphate, \$8.00 per ton. Price quotation from "Oil, Paint and Drug Reporter", March 1939.

15. Page 11. Price data on the various commodities (paper, rayon, rubber, petroleum, steel, and paint) are taken from publications of U. S. Bureau of Labor Statistics, Mineral Yearbooks of the Bureau of Mines, and "Oil, Paint, and Drug Reporter." The computation for paper was based on a market price for newsprint of \$50 per ton; for rayon, on a market price of \$0.50 per pound of standard yarn; for rubber, on a wholesale market price of \$12.00 for the average-size automobile tire; for petroleum, on a market price of \$3.00 to \$3.25 for the average products of a barrel of crude oil; for steel, on a market price of \$51 per ton of finished steel; and for paint, on a market price of \$0.06 per pound for zinc oxide, \$0.06 per pound for Titanox, and \$0.80 per gallon for linseed oil. Basic data for the computations can be obtained from standard textbooks, such as Riegel's "Industrial Chemistry."

16. Page 12. In the Gulf Coast region more than 136 salt domes have been proven by drilling. Ralph E. Taylor, "Origin of the Cap Rock of Louisiana Salt Domes," Geological Bulletin No. 11 published by Department of Conservation, Louisiana Geological Survey, August 1938. See also "Salt-Dome Statistics" by George Sawtelle, Bulletins of the American Association of Petroleum Geologists, Vol. 20, No. 6, June 1936, pp. 726-735. The additional salt domes indicated by geophysical surveys bring the total to more than 200.

17. Page 15. The total amount of crude sulphur produced between January 1, 1925 and January 1, 1938, amounted to 24,551,954 tons, while total shipments during the same period were 24,319,754 tons. U. S. Bureau of Mines, Minerals Yearbooks 1925-1937.

AGREEMENT BETWEEN SULPHUR EXPORT CORPORATION AND CONSORZIO OBBLIGATORIO PER L'INDUSTRIA SOLFIFERA SICILIANA

(Dated March 14, 1923)

This agreement made this fourteenth day of March 1923, between the Sulphur Export Corporation, a corporation of the State of Delaware, United States of America, hereinafter called the Export Corporation, party of the first part, and the Consorzio Obbligatorio per l'Industria Solfifera Siciliana, a compulsory association of all the Sicilian sulphur producers, created by the Italian law of July 15, 1906, number 333, hereinafter called the Consorzio, party of the second part, Witnesseth:

Duration.—This agreement shall continue for a period beginning October 4, 1922, and ending September 30, 1926, and shall be automatically renewed for consecutive periods of four years each, beginning with October 1, 1926, unless denounced by either party within six months of the expiration of the first period, or within six months of the expiration of any succeeding period, it being understood, however, that either party may terminate this agreement as of any March 31 or any September 30, during the term thereof, upon giving not less than six months' notice in writing to the other of such intention.

Tonnage.—In all the following articles of this agreement dealing with the division or allocation of tonnage, all exports made by other Italian producers or sellers of sulphur shall be included as part of the quota of the Consorzio; and the Consorzio guarantees that Italian producers and sellers of sulphur other than the Consorzio will not export sulphur for acid making at a reduced price.

Division of tonnage.—Subject to the conditions and agreements below set forth, the world's sulphur market excluding—

(1) The Kingdom of Italy, its dependencies and its colonial possessions—and

(2) North America, Cuba, the islands off the coast of Canada, and the insular possessions of the United States of America

shall be apportioned on the basis of allowing the Export Corporation 75%, and the Consorzio 25% of annual invoiced sales, including therein all exports of manufactured sulphur from the United States and from the Kingdom of Italy to all countries covered by this agreement as above.

If, however, under such division the invoiced sales of the Consorzio in any one year do not reach 135,000 long tons of 2,240 lbs. each, then in such event the Export Corporation will, from its portion, allocate to the Consorzio such tonnage as may be necessary to give the Consorzio a total of 135,000 long tons, for such year but in no case shall such additional tonnage so allocated exceed 45,000 long tons.

For the purpose only of determining quotas or tonnage, as above set forth, all exports of manufactured sulphur from the United States and from the Kingdom of Italy to all countries covered by this agreement as above shall also be included.

In making current determinations of allocation the exports of manufactured sulphur from the Kingdom of Italy shall first be deducted from the share of the Consorzio and similarly the exports of manufactured sulphur from the United States shall first be deducted from the share of the Export Corporation.

If the total invoiced sales of American sulphur in the Dominion of Canada shall exceed 75,000 long tons per year, then, in such event, the Export Corporation will, from its portion, allocate to the Consorzio additional tonnage equal to 25% of such excess.

For example, assuming the total amount of invoiced sales of crude sulphur plus exports of manufactured sulphur for one year under this agreement is 360,000 tons, of which amount 60,000 tons is manufactured sulphur, exported from the Kingdom of Italy, and 5,000 tons is manufactured sulphur exported from the United States, the Consorzio's proportion of the total of 360,000 tons being 25% or 90,000 tons, plus the guaranteed amount necessary to make up 135,000 tons, that is to say in this case 45,000 tons, and the Export Corporation's proportion of the total being therefore 225,000 tons, there shall be deducted from the Consorzio's quota of 135,000 tons the amount of manufactured sulphur exported from the Kingdom of Italy, to wit 60,000 tons, leaving a balance of 75,000 tons of crude sulphur to be sold by the Consorzio; there shall likewise be deducted from the Export Corporation's quota of 225,000 tons the amount of manufactured sulphur exported from the United States, to wit 5,000 tons, leaving a balance of 220,000 tons of crude sulphur to be sold by the Export Corporation; making a total of 295,000 tons of crude sulphur to be sold by the parties jointly, the percentage of the Consorzio being approximately 25.423% and the percentage of the Export Corporation being approximately 74.577%.

For further example, assuming that the total sales for one year are in excess of 540,000 tons, say 600,000 tons, 25% gives the Consorzio 150,000 tons, or more than 135,000 tons in which cases the guarantee of additional tonnage to the Consorzio does not apply, and assuming the same figures for manufactured sulphur as in the preceding example, then the amount of crude sulphur to be sold by the Consorzio would be 90,000 tons and the amount of crude sulphur to be sold by the Export Corporation would be 445,000 tons, the percentages being approximately 16.82% for the Consorzio and approximately 83.18% for the Export Corporation.

It is understood that should additional tonnage be due to the Consorzio by reason of invoiced sales of American crude sulphur in the Dominion of Canada being in excess of 75,000 tons per annum, such additional tonnage should be added to the Consorzio's quota as figured above.

Sulphur for acid making.—The privilege is accorded to the Consorzio to sell additional tonnage solely for the manufacture of sulphuric acid, at a reduced price. Such additional tonnage shall be sold in such manner as not to interfere with the normal market for sulphur. In no case shall such sales exceed 65,000 long tons per annum without the express approval of the Export Corporation.

Any shipments or deliveries made on or after October 4, 1922, on account of tonnage contracted for by the Consorzio with English acid makers previous to such date shall be included in computations under this article.

Sales made under this article shall not be considered as being included in the world's crude sulphur market as covered by this agreement nor shall such sales be included in determining quotas under this agreement.

Effective date.—The effective date of this agreement is October 4, 1922. The first year under this contract shall begin on such date and shall end September 30, 1923; all succeeding years shall begin with October 1 and end with September 30. All shipments and/or deliveries made on and after October 4, 1922, either from stock in warehouse or otherwise, shall be included in the computation of tonnage and quotas.

Price.—The prices, terms and conditions of sale of all sulphur sold under this agreement shall be fixed from time to time by the parties in such manner as best to serve their mutual interest.

Allocation.—The allocation or distribution of tonnage sold under this agreement shall be fixed from time to time in such manner as may afford each party the advantages of freight rates and market conditions arising by reason of geographical location with regard to the market served, insofar as this may be done without prejudice to the other party; but each party shall be entitled to its proportionate share of crude sulphur under this agreement of any market upon request to the other; and each party shall be obligated to take its said proportionate share in any low-priced market upon request of the other.

In order to effectuate this purpose and to facilitate the operations to the mutual and best interests of both parties, they shall each appoint an assistant executive representative, resident in Europe who shall constitute a central bureau for the exchange of data and compilation of statistics and shall assist in the allocation and distribution of tonnage and have such other functions as shall from time to time be assigned them by the parties for the furtherance of the purposes of the agreement. Each party shall promptly furnish to the Central Bureau copies of all contracts and invoices made by it and a note of shipments to warehouses and shipments of manufactured sulphur in the business covered by this agreement. Where in competitive markets the actions of the agents of the respective parties may become detrimental to the best interests of either of the parties hereto all the business under this agreement shall be transacted through the Central Bureau for such time as may by the parties be decided upon as proper.

Adjustments of tonnage and of sales shall be made for the period ending March 31, 1923, and for each successive period of six months. If at the termination of any such six-month period it is determined that either party has not sold its full quota as provided herein, or that adjustments in distribution and allocation of tonnage are necessary, such deficiency and necessary adjustments shall be made up within the next succeeding six-month period.

If at any time this agreement shall come to an end the final adjustment shall be made in cash at the average price f. o. b. the respective shipping ports for the period to which the adjustment refers, realized under this contract by the party to whom the cash is to be paid. The party to whom the cash shall be paid will hold the corresponding tonnage of sulphur at the disposal of the other party for six months free of any charge including insurance, and will deliver it f. o. b. the respective shipping ports at the other party's request. This tonnage of sulphur shall not be sold in the territories excluded from the world's crude sulphur market as defined under this agreement.

Statistical.—On or before the thirtieth of each month each party shall furnish to the other, and to the Central Bureau, a statement covering the operations of the preceding calendar month which shall show the total tonnage shipped, total tonnage sold and total tonnage delivered, destinations, prices realized, both f. a. s. and/or f. o. b. and/or c. i. f. and/or c. f., freight rates paid, and such other information as may be from time to time necessary for proper forecast and allocation.

Penalty for violations.—In case either party shall directly or indirectly export any sulphur or permit the export of any sulphur to the territories covered by this agreement otherwise than as herein provided, for each ton so exported there shall be a reduction in such offending party's allocation provided for herein of two tons and an increase in the allotment of the other party of two tons.

Manufactured sulphur.—It is judgment of both parties that the situation of the sulphur-manufacturing industry in the countries covered by this agreement should be maintained as it at present exists throughout the life of this agreement; each party agrees not to do or encourage anything which would result in altering such present situation and any action of a nature to alter such present situation shall be jointly considered and both parties shall use their best endeavors to prevent any such alteration.

Force majeure.—If by reason of force majeure either party is unable to ship its yearly quota or tonnage, in such event a revision of allocation to meet the situation as created thereby will be made so as to adjust the matter equitably.

Arbitration.—In case of a disagreement arising out of any matter in connection with the construction of this agreement or performance thereof, which it may be found impossible to settle by amicable arrangement, the same shall be submitted to a Board of Arbitration to sit in London consisting of three members: one chosen by the Export Corporation, one by the Consorzio and an Umpire to be chosen by the Joint agreement of the first two arbitrators.

In case of any party failing to appoint its arbitrator within fifteen days of the notice of the other party so to do, the party who has appointed an arbitrator may appoint that arbitrator to act as sole arbitrator in the reference, and his award shall be binding on both parties as if he had been appointed sole arbitrator by consent.

In case of the first two arbitrators failing to agree within fifteen days of their nomination as to the appointment of the Umpire, such appointment shall be made by the President for the time being of the London Chamber of Commerce upon request of either of the parties.

Insofar as not specially provided for in the present agreement, the arbitration shall be subject to the English Arbitration Act of 1889, or any Statutory modification thereof at the time subsisting.

Any award shall be final and binding upon both parties.

Legalities.—The agreement shall not be, nor be construed to be, in any respect as a partnership or agreement between the corporations holding shares of stock in the Export Corporation and the Consorzio nor to bind any of such Corporations in any way individually, nor the Italian Government.

It is agreed that this contract shall be deemed to have been executed and delivered at the City of London, England, and the interpretation and enforcement thereof shall be governed by the provisions of the English Law as it shall from time to time exist and it is agreed that, subject to the provisions hereof respecting arbitration, jurisdiction shall be given to the English Courts to take cognizance of disputes hereunder and to render judgment or decree which shall be binding upon the parties.

Notice and service of process.—Any notice provided to be given hereunder may be given in writing either by delivering the same in a sealed envelope addressed to the Central Bureau representative of the party to be served at the Office of the Bureau, or by service upon such representative in the manner provided by the laws of England for the Service of legal papers.

In order to make effective the provisions hereof in respect of arbitration and procedure in the English Courts, each party shall at all times maintain in the City of London a person or corporation upon whom legal process may be served on behalf of the other party in the manner provided by the laws of England for the service of legal papers with the same force and effect as if due service had been made upon either party at its home office in the Country of its incorporation or institution.

In witness whereof both parties have hereunto set their hands and seals the day and year first above written, the present being one of three triplicate originals so executed.

(Signed) SULPHUR EXPORT CORPORATION,
By CLARENCE A. SNIDER, *President*.

Attest:

(Signed) JAMES T. KILBRETH,
Secretary.

(Signed) CONSORZIO OBBLIGATORIO PER L'INDUSTRIA SOLFIFERA SICILIANA,
By ERNESTO SANTORO, *Commissioner*.

Attest:

(Signed) LOUIS DE LABRETOIGNE,
Secretary.

MARCH 14, 1923.

CONSORZIO OBBLIGATORIO PER L'INDUSTRIA SOLIFERA SICILIANA,

GENTLEMEN: Referring to the contract this day entered into between us, we herewith set forth certain additional and supplementary matters which have been agreed upon between us as follows:

(1) In connection with the article entitled "Sulphur for Acid Making" the Union Sulphur Company and the Texas Gulf Sulphur Company, both of whom are shareholders in the Sulphur Export Corporation, have each outstanding agreements with English acid makers for the sale of sulphur which run for a further period of approximately three years calling for a total delivery each year of 10,000 tons of sulphur and which have price protection clauses. The Sulphur Export Corporation is given the privilege of filing these contracts at such

reduced prices at which the Consorzio may sell to English acid makers under the article of the contract above referred to but such sales shall be figured a portion of the quota of the Sulphur Export Corporation under the said contract. Subject to all the conditions of the contract the Consorzio is, on the other hand, given the privilege of supplying sulphur ore for acid making, instead of crude Sulphur, up to the extent of not over 15,000 tons yearly of actually available sulphur contained in the ore.

(2) In connection with the article entitled "Price" the following schedule will be effective until changed by mutual agreement of the parties:

1. Spanish, Portuguese and French ports, Morocco and all Mediterranean ports, Belgium and Black Sea ports.....	\$22.50 c. i. f.
2. United Kingdom of Great Britain ports.....	21.00 c. i. f.
3. North European ports excluding Germany and Finland....	20.00 c. i. f.
4. Finland.....	21.00 c. i. f.
5. Germany, Holland and Poland.....	21.75 c. i. f.
6. Other African ports.....	22.50 c. i. f.
7. Oceanic ports (excluding Australia and New Zealand) and Asiatic ports (excluding Mediterranean ports) including the East Indies.....	22.50 c. i. f.
8. South American ports.....	21.00 c. i. f.
9. Australia and New Zealand.....	20.00 c. i. f.
10. All other ports.....	22.00 c. i. f.

Such prices are understood to be minimum net and refer to the highest Sicilian grade (best seconds) and American quality of crude sulphur per ton of 2,240 lbs. delivered weight, cash payment. In case of sales made on basis of weights shipped instead of weight delivered, there may be deducted for the purpose of allocation computations, not more than 1½% from the invoice weights, to cover wastage.

(3) In connection with the article entitled "Allocation" the Central Bureau shall be located in London, England, and all expenses thereof, except such salary or remuneration as may be paid to the representative thereon of the Consorzio, shall be borne by the Sulphur Export Corporation.

(4) In connection with the article entitled "Notice and Service of Process" the Sulphur Export Corporation has conferred upon Mr. Albert Hughes of London House, 35 Crutched Friars, London, E. C. 3, authority to accept service of legal process for it and hereby designates him as the party upon whom legal process under the agreement may be served to bind it; and the Consorzio hereby gives authority to Henry Gardner & Co., Ltd. of 2 Metal Exchange Buildings, London, E. C. 3, to accept legal service for it in England and hereby designates said Corporation as the party upon whom legal process under the agreement may be served to bind it.

We will thank you to confirm and accept the above.

Yours truly,

(Signed) SULPHUR EXPORT CORPORATION,
By CLARENCE SNIDER, *President*.

Confirmed and accepted.

(Signed) Consorzio Obbligatorio per l'Industria Solifera Siciliana,
By ERNESTO SANTORO, *Commissioner*.

[Copy]

LONDON, November 23, 1923.

THE CONSORZIO OBBLIGATORIO
PER L'INDUSTRIA SOLFIFERA SICILIANA,
Palermo.

GENTLEMEN: Referring to various matters arising out of the Contract of March 14, 1923, discussed between us at the close of the first year of operations, we understand that we are agreed upon the following as to the disposition thereof:

Price schedule.—The prices set out in the letter of March 14, 1923, addressed by us to you, are modified as follows:

(a) *Australia and New Zealand.*—Dependent upon further reports and recommendations of agents, a raise in price to \$22.00 per ton, c. i. f., to take effect July 1, 1924.

(b) *Sweden, Norway and Finland.*—Dependent upon the results of an investigation to be made by the Central Bureau as to the advisability thereof, a raise in price to \$22.00 per ton, c. i. f.

In the case of small lot shipments an additional \$1.00 per ton over the basic price shall be charged. "Small lots" are defined as parcels of less than 200 tons.

(c) *South America, Germany, North Russia, Latvia, Esthonia, Poland, Holland and England.*—A raise in price to \$22.00 per ton, c. i. f., to take effect immediately.

Standard form of contracts.—Owing to certain differences in the details of the business carried on by the Consorzio and the Sulphur Export Corporation respectively, there need be, for the present, no standard form for use by both parties, and each party is left free to use such form as may be most desirable for it. Information as to the nature of forms used shall be reciprocally given by the parties to each other.

Standard form and unification of statistical statements.—The consideration of a practical system for this is delegated to the Central Bureau, and the Representatives of the two parties thereon.

C. i. f. sales.—All sales shall be made c. i. f. except that the Consorzio shall not be required to make sales on this basis to their Nationals, nor in England if necessary to avoid imposition of English income tax. In both these cases the sales may be made on an f. o. b. basis, which shall, however, be at least the equivalent of the corresponding c. i. f. price.

Weighing costs.—The present practice on the part of the Sulphur Export Corporation, to pay weighing costs, may be continued.

Consular charges.—These charges shall be borne by the purchaser.

Sale of 4,000 tons to French and Spanish refiners.—As compensation for these sales made by the Consorzio at less than conference prices, prior to the Contract of March 14, 1923, the allocation of tonnage for the second year of operations shall be modified, so that an additional 3,000 tons for France and an additional 1,000 tons for Spain shall be allotted to the Consorzio, and the total amount of 4,000 tons thus allocated additionally in these countries shall be subtracted from the allocation which would have been made to the Consorzio for the United Kingdom in the absence of this special agreement, there being no increase in tonnage but a mere shift in allocation by reason hereof.

Sales in dollar currency.—All sales by both parties shall be in dollar currency, except such sales as may be made by the Consorzio to its Nationals.

Grouping of markets.—For purposes of allocation, South America shall be considered as one market, and Latvia, Esthonia, and North Russia shall also be considered as one market. Nevertheless, the Central Bureau shall continue to show the details of sales by countries in such markets, grouped as above.

Scale of allowances for different grades.—The Consorzio will make every effort to keep the differential between the various grades of Sulphur as small as possible.

Refined sulphur.—The Consorzio will sell to its national refiners at such price as will give them no advantage in price over foreign refiners, due regard being had to freights and exchange.

It is, of course, understood that the above arrangements may be modified or cancelled at any time upon mutual agreement of the parties.

We will thank you to confirm and accept the foregoing.

Yours faithfully,

SULPHUR EXPORT CORPORATION,
By C. A. SNIDER, President.

Confirmed and accepted.

CONSORZIO SOLIFERA SICILIANA
By ERNESTO SANTORO, H. M. Commissioner.

Box 1617, UNIVERSITY STATION,
Austin, Texas, May 23, 1939.

Mr. WILLIS J. BALLINGER,
Director of Studies for T. N. E. C.,
Federal Trade Commission, Washington, D. C.

DEAR MR. BALLINGER: The Federal Trade Commission has forwarded to me the memorandum dated April 21, 1939, from Mr. Leagbourne M. Williams, Jr., President of Freeport Sulphur Company, and asked for my comments, which are herewith submitted with the request that they be published with Mr. Williams' memorandum as a part of the formal record of the Committee.

In the first four pages of his memorandum Mr. Williams attempts to clear up what he calls a "confusion in terms," and in the position of the United States in world production of sulphur as covered in my testimony. He objects to the statement that "the United States produces over one-half of the sulphur in the world," and also that "the workable deposits are limited and are in two states only, Texas and Louisiana, and except for a few years and until very recently,

the supply has been furnished by two companies from generally not over one-half dozen mines."

In the same paragraph Mr. Williams states:

"The fact is that while the mines in Texas and Louisiana produce a large part of the sulphur consumed in the United States, they produce only 28% of the total sulphur consumed in the world. We believe, therefore, that this introductory statement gave an incomplete and unfortunate background for the story of sulphur."

In answer to the above contention of Mr. Williams, I quote from page 1158, Minerals Yearbook, 1938:

"World production of sulphur in 1937, including elemental sulphur recovered in the treatment of pyrites and as a by product from the manufacture of gas in Germany, is estimated at 3,500,000 long tons."

Production in the United States for that year was 2,741,970 long tons.¹ This represents 78% of the estimated world production. In 1936 the United States produced 83% of total world output; in 1935, 77%; and in 1934 and 1933, 72% each. All of these data are from page 1158, Minerals Yearbook, 1938.

On pages 3 and 4 of his statement Mr. Williams tries to discredit the charge that sulphur is produced in the United States by very few companies and under conditions of monopoly, by alleging that the testimony of the Federal Trade Commission did not take into account the fact that sulphur is manufactured from pyrites, and that the supply of this mineral is very widely distributed over the face of the earth. Mr. Williams says:

"The importance of pyrites as a competitive source of sulphur is also attested by the fact that in the year 1937, for example, American industry consumed over 580,000 tons of domestic pyrites and over 520,000 tons of imported pyrites, equivalent to more than 465,000 tons of crude sulphur out of a total American sulphur consumption equivalent to about 2,300,000 tons of crude sulphur."

It would be hard to find a more specious use of statistical data. The chief source of sulphur in the United States is native sulphur or brimstone. This is sulphur mined directly from the earth in a natural state and requiring no processing to make it ready for the market. Approximately 96% of all the sulphur produced in the United States for commercial sale in 1937 was produced by four sulphur companies, the two largest of which accounted for approximately 90%. These four companies did not produce their sulphur from pyrites. Their sulphur is mined and shipped and sold in its native state. Consequently, only approximately 4% of the sulphur produced for the commercial market in the United States is produced from any source other than brimstone. Production of sulphur from pyrites, therefore, could at most account for only 4% of the commercial sulphur of the United States. But it is not as great as that. Sulphur produced from pyrites is largely consumed by the companies manufacturing it in their own business. Only a small percentage, therefore, of sulphur produced from pyrites is sold commercially. The Federal Trade Commission testimony was not concerned with sulphur which is not sold commercially. The Minerals Yearbook for 1938, at page 1160, shows that in the year 1937 only 181,322 tons of pyrites with a 39.7% sulphur content or the equivalent of 72,000 tons of sulphur, was sold in the U. S. Market. This 72,000 tons represented only about 2% of the total U. S. production of sulphur in 1937. Mr. Williams' distortion of the competitive influence of sulphur manufactured from pyrites on sulphur produced from natural ore is therefore obvious. But there is another point to be considered when it is alleged that sulphur manufactured from pyrites exercises any competitive influence over sulphur produced from natural ore. The 2% of sulphur manufactured from pyrites has had no visible price effect on the great bulk of American sulphur produced from natural ore. With sulphur selling at \$18.00 per ton f. o. b. the mines, the price of pyrites must be less than 12c per unit to provide any real competition. Pyrites have not been below that price in the past 13 years. The fact is, the price of pyrites has been as rigid as the price of brimstone, as is shown in Exhibit 375. That does not indicate competition, in any valid sense.

Mr. Williams states, with underlining for emphasis, at four places on page 5 that the agreements between Sulexco² and the Italian producers, made originally in 1923 and renewed and revised at various times thereafter, did not reserve specific markets for the American producers and other markets for the Italians. These agreements state:

¹ Of this the Texas Gulf Sulphur Co. (operating two properties, both in Texas) produced 1,745,829 long tons and the Freeport Sulphur Co. (operating one property in Texas and one in Louisiana) produced 711,520 long tons (U. S. Minerals Yearbook 1938: 1157), or a total for the two companies of 2,455,349 long tons, or about 90% of the U. S. production, and over 70% of the world production.

² Sulphur Export Corporation.

"*Division of tonnage.*—Subject to the conditions and agreements below set forth, the world's sulphur market excluding: (1) The Kingdom of Italy, its dependencies and its colonial possessions and (2) North America, Cuba, the islands off the coast of Canada and the insular possessions of the United States of America, shall be apportioned on the basis of allowing the Export Corporation 75%, and the Consorzio 25% of annual invoiced sales * * *."

"For the purpose only of determining quotas or tonnage, as set forth above, all exports of manufactured sulphur from the United States and from the Kingdom of Italy to all countries covered by this agreement as above shall be included."

This quotation is from the original agreement of 1923, and has been repeated in the subsequent revisions.

The only reasonable interpretation possible is that the specified markets in America were reserved for the American producers; and the Italian markets for the Sicilians. This is the interpretation put upon the statement by every commentator on the subject, so far as my reading goes. For instance Mr. Theodore J. Krepes, at page 104 in his book, *The Economics of the Sulphuric Acid Industry*, says:

"Fortunately it was possible in 1923 to form a gentlemen's agreement * * * whereby the North American market was reserved for the Texas companies, Italy was reserved for Sicily * * *."

The validity of this interpretation is proved by the record. From 1923 to 1929 not a pound of American sulphur was exported to Italy. In 1930 three tons went to Italy; but it was "crushed and refined sulphur", not brimstone or natural sulphur. In 1935, 33 tons were exported from the United States to Italy; and in 1936, 82½ tons. In short, during the life of these agreements only 118½ tons of sulphur of any description have been exported from the United States to Italy; and this all has been processed sulphur, which is specifically exempted from the agreements. From 1923 to the end of 1936 the Italian producers have not shipped a pound of sulphur to the United States except in one year. In 1934 they shipped us 35¾ tons; which is approximately the amount produced by the American companies every seven minutes. Furthermore, this shipment occurred in 1934. In 1932 the original agreement had been allowed to lapse. During 1933-34 negotiations for a new agreement were being carried on. Whether this was also refined sulphur, and hence excluded from the agreements, we have not been able to ascertain.¹

In reference to Mr. Williams' discussion (pages 5 to 8) concerning the reports filed with the Federal Trade Commission from time to time by Sulexco, and the failure of the Commission to take any action thereon, I should like to state that this is outside my field of competence in the matter. My own testimony concerning these Sulexco agreements was to the points that:

1. They provided bases for a thorough and complete world monopoly;
2. The price of sulphur for the entire world was effectively fixed thereby;
3. And the fixing of world prices made it possible to maintain a fixed and monopoly price within the United States.

These points are unequivocally proved by the exhibits introduced, and by the actions of the companies during the life of the agreements.

Mr. Williams (p. 8) objects to my reference to the sulphuric-acid bottleneck. He says:

"Reference to a bottleneck would seem to imply obstruction to free passage, to expansion, to smooth operation, perhaps to efficient and economic operation in general. The use of the term here would seem to mean that the free use of sulphuric acid is impeded and thus constitutes an obstruction to the operation of industry."

I had not intended to imply that the sulphuric-acid industry is monopolized, as that was not under consideration at the time. I had intended to say that insofar as the acid industry depends upon brimstone as its raw material, that brimstone constitutes a bottleneck.

Every private monopoly in a system of free business enterprise is a bottleneck. Every private monopoly does constitute "an obstruction to free passage * * * to smooth operation, and perhaps to efficient and economical operation in general." Any monopoly which does not do so cannot maintain monopoly prices, and monopoly profits.

The bulk of sulphuric acid produced in the United States is manufactured from sulphur produced by four companies heretofore referred to, which companies produce native sulphur. To the extent, therefore, that sulphuric acid is manufactured from

¹ These figures supplied to the Commission by the Bureau of Foreign and Domestic Commerce, Department of Commerce.

this native sulphur, these four companies constitute "an obstruction to the operation of the industry" manufacturing sulphuric acid. The industry manufacturing sulphuric acid, being forced to obtain its ingredient sulphur from an industry which we have shown to be highly monopolized, is prevented from selling sulphuric acid at as low a cost as the free flow of competition would make possible. If the industry manufacturing sulphuric acid obtained the bulk of its raw material sulphur from an industry that was producing this sulphur under competitive conditions, the cost of manufacturing sulphuric acid could be less, and under competitive conditions this lessened cost could reflect itself in lower selling prices for sulphuric acid; provided, of course, that the industry manufacturing sulphuric acid is operating under competitive conditions. If it is not, the manufacturing of sulphuric acid is burdened by two monopolies.

As a matter of sound competitive theory, if an industry operating under conditions of competition is forced to obtain its essential raw material from an industry that is monopolized, the effect of such monopolized industry is to increase the cost of manufacture in the competitive industry. Where, therefore, the effect of a monopoly is to increase the cost of manufacture in a competitive industry, such monopoly does constitute "an obstruction to the smooth operation," and certainly "to the efficient and economic operation of that industry in general." The purpose of competition is to obtain as low prices as possible, and if the effect of a monopoly is to increase competitive costs and therefore raise competitive prices, such monopoly is clearly an "obstruction" to the most efficient operation of the competitive industry.

Mr. Williams' figures (pages 10 and 11) concerning the small element in the retail price of manufactured articles represented by the cost of brimstone, are doubtless correct. If brimstone were the only bottleneck in American industry, it would not be of vital significance. But this is clearly not true. This Committee is engaged in a study of monopoly in American industries. Here we have a small industry which for a long period of time has been almost perfectly monopolized. It would be hard to imagine a more satisfactory miniature specimen for a study of group characteristics, incidents, and effects.

Mr. Williams (page 12) refers to my statement that the native sulphur industry has been closely monopolized for forty-two years. He says: "We may test the validity of this assertion by ascertaining whether new companies have been able to enter the field, and to sell their product."

Since 1903 four companies have entered the field. One in 1913; one in 1919; one in 1928; one in 1932.¹ However, the last two are operating on properties owned, in whole or in part, in fee simple or through lease agreements, by one of the other two companies. During the past ten years these two major companies have produced above 90% of the total of the four.

In the meantime, according to Mr. Williams' testimony (page 12), "in the Gulf Coast Region more than 136 salt domes have been proven by drilling and a considerable number of additional salt domes have been indicated by geophysical surveys." As shown by our exhibits the price of sulphur has been amazingly stable; and the profits of the companies have been quite remarkable. Furthermore, the salt domes have been discovered by a large number of different oil companies. But it is important to note that all of these salt domes which have had any substantial indication of sulphur content have been leased either to the Texas or the Freeport sulphur companies for development. Now, it should be remembered that the two small companies at present producing native sulphur in the United States operate only properties leased from the two big companies (the Texas and Freeport Sulphur Companies). This fact is certainly open to the interpretation that these two small companies could not even be in existence but for the fact that the two big companies were willing to lease them some of their properties.

Moreover, the fact that only four companies have entered such an industry during the past thirty-six years with at least 136 opportunities open, and with the two recent small companies operating only on sufferance from the two larger ones, scarcely indicates a field into which it has been easy for new companies to enter. Under these circumstances, it is little short of ridiculous for Mr. Williams to contend that the discovery of a number of salt domes has been an opportunity for the free entrance of companies into the industry producing native sulphur.

Concerning the use of Sullexco as a monopoly device for raising and maintaining the domestic price, Mr. Kreps (page 103) says:

"In 1922 a Sulphur Export Corporation was formed under the provisions of the Web-Pomerene Act. * * * This has served effectively ever since preventing price competition not only in the foreign market but also in the home market." [Italics supplied.]

The facts are conclusive.

¹See U. S. Minerals Yearbooks.

The failure of price to respond to excess production, excess productive capacity, and huge stocks on hand, is one of the conclusive evidences of monopoly. Mr. Williams objects to my testimony on this point. At page 15, he says:

"The fact of the matter is that the total amount of crude sulphur produced in the United States between January 1, 1925, and January 1, 1938 amounted to 24,551,954 tons, while total shipments (sales) during the same period was 24,319,754 tons."

Quite true. Over a thirteen-year period any industry, that has the power to control output, will sell its total production.

The year-by-year figures show a different picture. The following lists shows in round numbers the ratio of annual sales to inventory (production during each year plus stock above ground at the beginning of that year) for each of the years covered by Mr. Williams' data. (My data for Texas Gulf Sulphur Company do not extend beyond 1929):

Year	Free- port	Texas Gulf	Year	Free- port	Texas Gulf
	Percent	Percent		Percent	Percent
1925	56		1932	31	27
1926	62		1933	37	50
1927	65		1934	35	35
1928	56		1935	35	40
1929	56	94	1936	42	46
1930	46	63	1937	47	52
1931	32	35	1938	36	23

It would be difficult to find more conclusive proof of monopoly than this. In 1932 less than 30% of the brimstone available to the market was sold. In 1931 only 34% was sold. In 1933 less than 50%; in 1934, exactly 35%; in 1935, less than 40%; in 1936, about 45%; in 1937, just over 50%; and in 1938 again less than 30%. And yet price reacted not at all. In competitive industry, under those conditions prices react.

American business had suffered the most serious depression of its history. Prices, in competitive industries, had spiralled downward. Competitive industries having serious surpluses suffered the most serious price declines. In 1929-30 the mills of the world consumed only 66% of the available stock of cotton; in 1930-31, about 60%; and in 1931-32 approximately 55%. Note that these figures do not approach those for sulphur; yet the price of cotton declined, in three years, over 70%. Price declines occurred in every competitive industry, related—more or less closely—to excess capacity, excess production, and excess stocks. The price of brimstone had remained absolutely rigid at \$18.00 per ton f. o. b. the mines.

Mr. Williams states that the total sales of \$174,546,023 for the 20-year period, as shown in Exhibit 389, Table 2, includes more than \$15,500,000 representing sales of asphalt, oil, transportation service, light, water, ice, etc., by subsidiary service companies; thus reducing the sales of sulphur as shown in the exhibit from \$174,546,023 to approximately \$159,000,000 for the 20-year period. However, Williams has offered no detailed information with respect to items making up the asserted amount of \$15,500,000 nor the years to which they apply—neither did he mention or indicate what portions of the costs and expense, shown in Exhibit 389, Table 2, were applicable to these other sales. Therefore, in the absence of further information, it still remains impossible to determine whether profits were realized or losses sustained on the operations of these subsidiary service companies. The only information we have available on this point is shown in reports for the years 1927, 1928, and 1929 which indicate "losses on other operations" for the respective years in the amount of \$45,426, \$181,724, and \$109,349. This indicates that the net income applicable to sales of sulphur as shown in Exhibit 389, Table 2, are understated for the three years by these amounts. In any event in the absence of further information, it would appear that the net income shown in Exhibit 389 would in all probability be increased for sulphur sales, and not decreased, if all proper adjustments were made with respect to the operations of these subsidiary service companies.

Mr. Williams objects to the data contained in Exhibit 376, which estimates the cost of producing sulphur by the Freeport Sulphur Company. These data refer to costs before payment of royalties by the Freeport Sulphur Company to oil companies and other parties. The purpose of this exhibit was to show that an undue spread exists between the cost of producing sulphur and the price at which it

has been sold. In determining the cost of producing sulphur for the Freeport Sulphur Company, I employed an accounting method which has behind it considerable scientific authority. This method rejects royalties as a cost of production, particularly where royalties constitute merely a claim on net income. Such a claim can never be a cost of production, according to this method of accounting. From 1922 to 1932 the Freeport Sulphur Company paid royalties which were computed on the basis of a percentage of the net earnings of the company. Net earnings cannot be arrived at until all costs have first been deducted, and consequently an attempt to include any part of net earnings as a cost of producing sulphur is a perversion of the whole concept of net earnings.

From 1932 to 1938 a part of the royalties paid by the Freeport Sulphur Company represented a percentage of the net earnings of the Freeport Sulphur Company, and part of them represented a fixed charge against each ton of sulphur mined. During this period such fixed charges could have been included as a part of the cost of producing sulphur, but that part which was paid as a percentage of the net earnings could not have been so included.

It is important to notice that my theory of accounting is subscribed to, at least in part, by Mr. Williams himself. According to Mr. Williams' own statement, federal and state income and profits taxes are treated as deductions in arriving at net income, rather than as costs of production. Certainly royalties contingent on profits may well be placed in the same category.

In Moody's Manual of Industrials I find that the Freeport Sulphur Company values its inventories under a method of accounting which expressly excludes any allowance for royalty payments. If the value of this sulphur carried in inventories is carried on the books of the Freeport Sulphur Company at a valuation which expressly excludes any allowance for royalty payments, there is clearly a recognition by the accountants of the Freeport Sulphur Company of the method of accounting which I insist should be used.

Furthermore, for several years the company reported "costs of production" to Moody's Manual: for instance in 1927 they were \$6.07 per ton; in 1928, \$5.71, and in 1929, \$5.30. These "costs" as reported by the company obviously do not include royalties to the oil company. And they are just 43¢ per ton below the ten-year average as computed by me in Exhibit 376.

I do not say that Mr. Williams cannot find accountants who will not declare that royalty payments should be included as a cost of production. I merely elected to use the accounting method which I believe would have reputable accounting sanction. However, it is really immaterial whether my method of accounting is employed or whether Mr. Williams' method of accounting is employed in determining the cost of producing sulphur. The purpose of my exhibit (Exhibit 376) was intended to show that an undue spread exists between the cost of producing sulphur and the price at which it was sold. When one takes into account the phenomenal earnings of the Freeport Sulphur Company, there can be no reasonable doubt that such an undue spread does exist. Consequently, even if Mr. Williams' method of accounting may have some scientific authority, it still follows that even his method of accounting cannot conceal the fact that there is an undue spread between the cost of producing sulphur by the Freeport Sulphur Company and the price at which this company sells the sulphur. Since the sole purpose of Exhibit 376 was to sustain this point, I feel that a discussion of the relative merits of two theories of accounting is unnecessary. The conclusion which I sought to establish can be soundly and indisputably vindicated by reference to the earnings of the Freeport Sulphur Company, which earnings the accountants of the Federal Trade Commission determined after excluding from them all royalty payments.

Mr. Williams says (page 18), ". . . it seems to us that what the Committee is endeavoring to ascertain is the return to the people who invest their money in this kind of industry; or, in other words, the amount of earnings available for dividends." In a study of monopoly profits it would seem to be of slight consequence whether those profits were distributed in dividends, or in salaries, in fees, in commissions, in bonuses, in intercompany transfers, or in royalty payments. The matter of serious import is whether such profits exist, and, if so, their effect on a system of free business enterprise.

Mr. Lundvall's accompanying memorandum covers Mr. Williams' discussion of the accounting computations in Exhibit 389 (pages 15-19). However, Mr. Williams concludes his statement, on page 19:

"Finally a climax was reached when Mr. Ballinger asked: 'What do you think of a company, the Freeport Company, that in 1931 can make 34 percent return on its invested capital? Doesn't that indicate to you the absence of competition?'"

To which question I replied, ". . . I should say, certainly it indicates monopoly to me."

Unfortunately a clerical error was involved in the computation of the 34% profit figure for 1931. The correct figure should be 24.78%. Let the record show that I do not care to change my answer to the question. It should be pointed out that only 32% of the company's marketable brimstone was sold during that year, and the company increased its stock above ground by 294,879 tons—more than its total production for the following year. Furthermore, the company's profits the year before were 33.07%, when again only 46% of its available brimstone was sold; and 21.33% the year following, when only 31% was sold.

The logic of the data in Exhibits introduced is irrefutable: A closed monopoly has existed, and does exist, in brimstone; not only in the United States, but in the world markets. Proofs of this monopoly, as well as its effects, are conclusively shown by the following facts:

(1) An absolutely rigid price has been maintained for more than a decade, and this despite the greatest price debacle (in competitive industries) of modern times; and further despite the facts of vast surpluses—larger, I believe, than in any other single industry in the modern world (over 4,250,000 tons above ground on January 1, 1939—*more than one and one-half times* our average annual production.

(2) Production has been rigorously controlled. (Note figures in Exhibit 374; also note restrictions imposed on Orkla: Exhibit 387.)

(3) The introduction of new techniques has been effectively sabotaged. (Note Exhibit 387.)

(4) *Profits have been higher than those of most any competitive industry of which I have any knowledge. High profits by themselves are not conclusive evidence of the existence of monopoly, as there are competitive industries which have shown large rates of return. But in those competitive industries where high rates of return were earned, the industries reduced the price of their product and distributed it to ever-increasing numbers of consumers. Where, however, high profits exist accompanied by other surrounding circumstances, such as a rigid price maintained for a considerable period of time even in the face of large stock surpluses during a prolonged business depression, and the inability of new companies to enter such a highly profitable field so as to reduce the rate of return to a reasonable percent over a period of nearly forty years, then the existence of a high rate of return is an important corroborative indication of the existence of monopoly.*

This memorandum is submitted in an attempt to clear up the matters covered in Mr. Williams' letter. We respectfully request that it be made a part of the published record.

Sincerely yours,

R. H. MONTGOMERY,
Professor of Economics, the University of Texas.
Consultant, Federal Trade Commission.

MEMORANDUM CONCERNING RATES OF RETURN ON INVESTED CAPITAL FOR FREEPORT SULPHUR COMPANY

In a letter dated April 21, 1939, from the President of Freeport Sulphur Company to the Executive Secretary of the Temporary National Economic Committee, certain comments, beginning with the last paragraph on page 17 and running over to the middle of page 19, are made taking exception to the Commission's method of calculating rates of return on invested capital.

A recheck of Table 1 at page 4 of Exhibit 389 reveals certain clerical errors which should be corrected. For the year 1919 the table shows profit of \$1,071,715 and rate of return on total investment of 11.13%. The correct profit is \$1,184,625 and the correct rate of return 12.3%. For the year 1931 the profit is shown as \$3,635,343 and the rate of return 34.18%. The correct profit is \$2,635,343 and the correct rate of return 24.78%. For the year 1938 the profit is shown as \$1,707,630 and the rate of return 9.5%. The correct profit is \$1,677,630 and the correct rate of return 9.33%. These corrections will change the average profit for the 20-year period shown in the table of \$2,059,975 to \$2,014,120 and the average rate of return of 16.23% to 15.87%.

The company takes exception to the principles used in computing the rates of return, contending that if the computations were made after deducting Federal income and profits taxes and including certain surplus additions and deductions,

the average return on investment during the 20-year period under review would have been 12.28% instead of the 16.23% shown in the report. In calculating the returns the Commission's examiners used as profits the net income from operations before charges for Federal income and profits taxes and did not include surplus additions and deductions.

It has been the policy of the Commission to compute rates of return on invested capital before deducting Federal income and profits taxes because such taxes are not operating expenses—they are contingent upon profits and represent a division of the earnings of the business. Aside from the difference of opinion in the treatment of this item the company calls attention to the fact that the figures used in the report contain over \$1,700,000 of property taxes, but does not state to what years they apply. The identity of such taxes as part of Federal income and profits taxes was not evident from any records available to the examiners. Obviously, if the amounts classified as Federal income and profits taxes include property taxes, the latter should be classified as operating expenses and the rates of return adjusted accordingly.

The company also contends that certain charges to surplus for prospecting expenses amounting to \$2,811,693, and other charges in the net amount of \$1,978,106, representing losses and gains from the sale of capital assets, the portion of losses and profits applicable to the stocks of Cuban-American Manganese Corporation held by Freeport Sulphur Company, which have no connection with sulphur operations, adjustments of depreciation reserves and miscellaneous deductions and additions, should all have been taken into account as operating expenses or income in computing rates of return. The items making up these amounts were not consistently accounted for by the company. In some years they were handled through the income account and in other years through the surplus account. Because they were in the nature of extraordinary charges and credits of varying amounts and did not occur in all years they were classified by the Commission's accountants as surplus deductions or additions. To have classified them otherwise would have resulted in distortion of the yearly comparisons of operations and returns on investment.

No doubt some portion of the amounts referred to above, particularly those relating to prospecting expenses, apply to the income account during the 20-year period under review, but the amount is not known, nor can any equitable basis be determined for amortizing the charges to operations in order to ascertain the amount applicable to the period or to any year within the period without an exhaustive study. Even if the net result of the items in question, including the \$1,700,000 of property taxes which the company states are included with the figures for Federal income and profits taxes, are considered as operating charges rather than surplus charges, the average rate of return on invested capital for the twenty years would be 13.31 percent.

Respectfully submitted,

A. E. LUNDVALL, *Examiner.*

APRIL 26, 1939.

AEV: sro.

"EXHIBIT No. 390," introduced on p. 2003, is on file with the Committee.

"EXHIBIT No. 391," introduced on p. 2006, is on file with the Committee.

"EXHIBIT No. 392," introduced on p. 2006, is on file with the Committee.

"EXHIBIT No. 393," introduced on p. 2006, is on file with the Committee.

EXHIBIT No. 434

AN EXTRACT FROM THE ADMINISTRATOR'S REPORT OF MARCH 9, 1935, ENTITLED
"AGRICULTURAL ADJUSTMENT IN 1934"

After producers had demonstrated their willingness to adjust production in 1934, domestic buyers agreed to pay higher prices for purchases from the 1933 crop. Six marketing agreements were negotiated for the principal kinds of tobacco grown in the United States. Under these agreements approximately 645,000,000 pounds of tobacco were purchased, nearly half the total 1933 production, at prices materially higher than would have otherwise prevailed.

It is estimated that the tobacco program increased the market receipts of farmers from the 1933 crop by approximately \$45,000,000. Tobacco growers received \$187,911,000 for the 1933 crop from sales on the markets. In addition, during the marketing season for the 1933 crop they received approximately \$16,500,000 in rental and benefit payments under the adjustment contracts. The grower's share of the tobacco consumer's dollar increased from 4½ percent in 1932 to 10 percent in 1933. Manufacturers' profits on the other hand declined from above 10 percent of the consumer's dollar in 1932 to about 7 percent in 1933.

J. B. HUTSON, Assistant Administrator.

EXHIBIT No. 476

[Beryllium Corporation]

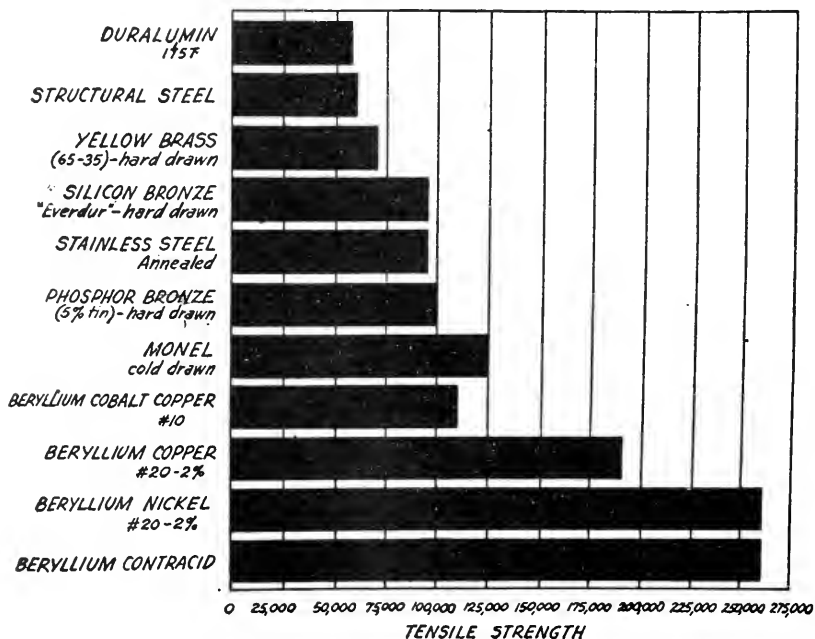


EXHIBIT No. 477

[Siemens & Halske file]

DECEMBER 19, 1929.

From Dr. V. Engelhardt, Siemens & Halske A. G., Schillerstrasse 11, Charlottenburg.

To Dr. F. H. Hirschland, New York.

DEAR DOKTOR HIRSCHLAND: Perhaps you have received in the meantime from your Austrian Patent Attorney Hess, detailed reports regarding the result

of the verbal discussion before the Austrian Complaint Department in regard to your "Lead-in-Wire" Process. I beg leave to send you herewith enclosed copy of a file memorandum from our Patent Engineer Hoppe, who acted as expert advisor to Mr. Hess in the negotiations before the Complaint Department.

I am glad that the two men succeeded, in a non too easy fight, to secure the granting of your application. As I learned directly from Mr. Hoppe, remarks made by the Patent Attorneys of the Philips Gloeilampen Fabriken seem to indicate that this firm seemingly takes a very great interest in the subject of your application, and that this is the reason why they raised such energetic protests in the various countries against the patent claims.

Now I come with another request. As you know, we have applied for patents also in America for the most important rights in the realm of Beryllium. Of these only a few patents have been granted so far, among them the process for remelting and purifying metallic Beryllium, the improved Nickel-Beryllium alloys, the improvement of iron-Beryllium alloys, as well as the process granted some time ago to Stock-Goldschmidt for the Production of Beryllium by means of the molten metal electrolysis. But other important applications are still awaiting action on the part of the Examiner. The examination of one of these, by the American Patent Office has entered into a critical state, namely that of "Process for the deoxydation of Heavy Metal Castings, particularly, Copper Castings, by means of Beryllium." This application was rejected in the first instance by the American Patent Office, although the Examiner did not succeed in proving the subject of the application (that is, the use of Beryllium as a deoxydizer) as already known. He based the rejection merely on the assertion that according to analogous inference from well known deoxydizers, such as magnesium, aluminum, etc., the use of Beryllium no longer presented a patentable invention. This is all the more surprising as the patent on the same subject has been granted in the meantime in Germany, England, Italy, Belgium and France without any particular objections. To this must be added the fact that I place a particular value on this patent, as in this way we have a means of controlling the use of Beryllium for deoxydation purposes and that, according to our experiences, the use of beryllium for this purpose may become very important. I even consider it possible that, especially in a country like America, we may be able to grant special licenses for the use of this patent, since, in spite of the present price of Beryllium, a noticeable saving of material can be effected wherever it is a question of increasing the electrical or the thermal conductivity, on account of the reduction in the diameter permitted thereby.

Considered also from a purely patent-technical view point, as a matter of principle, we should insist upon securing the granting of this patent, because an astonishing effect can be claimed which, essentially, consists in this: through the use of Beryllium as a deoxydizer, especially in the case of copper castings, not only an excellent casting is obtained, but, as already mentioned, all the other qualities are surprisingly good. If the standpoint of the American Examiner would be recognized in this instance, the Examiner might assume from this a position of principle also in later patent rights, in accordance with which merely analogous inferences might anticipate later inventive ideas.

In this connection I would like to mention to you, dear Dr. Hirschland, candidly my opinion that not only in the present instance, but as we had occasion to note repeatedly heretofore, the American Patent Office must have weighty political or national reasons which cause it to measure with two kinds of measures. I have been repeatedly able to note that patents were promptly granted to inventors in America, while applications from German inventors, while constructed along the same lines, were objected to and frequently ended in rejections. I am thinking in this connection of patents in which, aside from the process for the production of a certain material, the material thus produced was to be covered by the same patent. An American application is granted, if no prior publication can be proved, promptly such a patent, which actually covers two different subjects, while a German applicant is always asked to apply in a separate application for the patenting of the material made by a certain process.

My request is now to the effect that your Patent Department of the excellent working of which I had repeated proofs during the several years of friendly collaboration in connection with chrome-plating,—should take up this application for deoxydation by means of Beryllium and keep on fighting for it in connection with the firm of patent attorneys Lotka, Kehlenbeck & Farley, 15 Park Row, New York, who has represented my firm in patent matters in America, and in whose hands now is the entire documentary material in regard to the above application.

I would at once agree to have the application assigned to your firm, if thereby the matter could be better pursued, when it appears under American auspices before the Patent Office, in a new shape or form. Since you, as I was happy to learn from Dr. Frank, have decided to take up the Beryllium matter in America, I assume that you, too, are interested in the fight for these patent rights, so that outsiders, like the Beryllium Corporation, that is, their successors, the General Electric Co., etc., cannot secure any ground in the realm of the Beryllium-Heavy-Metal industry.

If you are willing to comply with my request and to pursue the above application further in America, I would thank you to send me a brief telegraphic reply. Speed is advisable, as the next step in regard to the application in question, in connection with the American Patent Office, has to be made by the middle of next April. In that case my firm would send you, for order's sake, a formal advice, and at the same time the Patent Attorneys, Messrs. Lotka, Kehlenbeck & Farley would be requested to permit you to study the documents and to surrender to you the further initiative in this matter.

I take this opportunity to wish you a joyous festival and a Happy New Year in every respect.

With kindest regards,

Yours very truly,

(Signed) V. ENGELHARDT.

EXHIBIT No. 478

[From files of Metal & Thermit Co.—Translation]

Dr. V. Engelhardt, Director
Siemens-Halske A. G.

BERLIN CHARLOTTENBURG, November 21, 1930.

Dr. F. H. HIRSCHLAND,
New York, N. Y.

DEAR DR. HIRSCHLAND: The patent department of our Corporation tells me that again some difficulties are being encountered in the preliminary examination into various applications concerning beryllium. In making applications, the opposition must frequently be made use of. In this instance it concerns the electrolytic production of beryllium according to the method which we are now employing on an industrial scale.

I cannot help feeling that in the office opinions certain national interests in the U. S. A. play a role of some importance. We have discussed this phase previously, and I believe you agreed with my view.

Since you were kind enough to say that you would be willing that further applications in the beryllium field in which we are having trouble in the States, be made in the name of your concern, and have the patent matter pursued by your patent attorney Mr. Dane, I should be very grateful, if I may now make further use of that offer. We are concerned at present about seven of our applications.

Mr. Dane has shown his mettle in bringing through our beryllium deoxidation patent which looked very bad at the time he took a hand and succeeded in a manner that induced our patent department to engage Mr. Dane directly for some of our patent applications concerning chemical and electrochemical specialties.

I should thank you very heartily if you could send me your consent in this matter as soon as possible, for the disposition of some of the Office Actions needs urgent attention.

Of course, any expenses incurred by your firm or by Mr. Dane in this connection are to be charged to Siemens & Halske direct, as they come up.

(Signed) DR. ENGELHARDT.

EXHIBIT No. 479

[From files of Metal & Thermit Co.]

JANUARY 15, 1935.

Re: EL. 20356.

SIEMENS & HALSKE, A. G.,
Berlin-Siemensstadt, Germany.

DEAR SIR: We recently received a letter from The Beryllium Corporation, copy of which is enclosed herewith, and we have acknowledged this letter and also enclose a copy of our acknowledgment, so that you may be fully informed.

Your letter of August 13th written after conversations held with the writer in Essen, and which states that it confirms those conversations, does not state

all of the details necessary for a complete agreement upon this matter. In order that there might be no misunderstanding in the future, it seemed to us advisable in view of the letter from The Beryllium Corporation to have complete accord in writing.

The sum of \$10,000.00 mentioned in your letter is to cover full compensation for our services rendered to you up to this time. The closing of the matter upon the basis under discussion will require no further services from us, and therefore this will be complete payment to us in this matter.

With reference to the patents and patent applications which we are holding in our name but solely for your account, we believe that they should be transferred from our name to you or some other nominee for you. Inasmuch as patents have been issued upon all of the pending applications and there are only issued patents involved, this will be a simple matter. If you will advise us to whom transfer is to be made, that is, whether to your name or to some other name, we will be pleased to have Mr. Dane prepare the transfers and either mail them to you or deliver them as you instruct.

With reference to the payment of this \$10,000.00, for our protection it is necessary that we have a formal irrevocable order from you upon The Beryllium Corporation for payment to us of ten per cent. of any and all license payments as and when they become due from them to you until this sum of \$10,000.00 has been paid. If you will send us such a document we will present it to The Beryllium Corporation for acceptance by them. This document, accepted by The Beryllium Corporation, should be in our hands at the time we deliver the assignments of the patents.

Inasmuch as we have been acting in this matter solely for your account, and this is now concluded, we will be as free to act in the future as if we had never acted for you in these matters.

Kindly confirm in writing this as being the complete agreement upon this matter.

Very truly yours,

(Penned notation:) Copy sent to Dr. M. H. Waldhausen 5/16/35. H. S.

EXHIBIT No. 480

[From files of Metal & Thermit Co.]

DECEMBER 3, 1930.

Prof. V. ENGELHARDT,
c/o Siemens & Halske, Wernerwerk Z,
Berlin-Siemensstadt, Germany.

DEAR PROF. ENGELHARDT: Your letter of November 21st has just been received and I noted its contents. While we have no reason to believe that National interests influence the Patent Examiners in their findings, we will be very happy indeed to act for you in the applications on which you have difficulties at present, and we have discussed the matter today with Mr. Dane who also is very happy to prosecute these applications further for you.

Mr. Dane, however, has asked us to impress upon you that, while he is going to make every effort in his power, he does not want you to have the opinion that, because he was successful once, he will always be successful in future.

We ourselves will be very glad to give the matter every assistance possible. As you wrote in your letter that some of the applications require immediate attention, I have cabled you today as per enclosed copy.

With kind regards, I am,

Yours sincerely,

H=ES.

EXHIBIT No. 481

[From files of The Beryllium Corp.]

AGREEMENT BETWEEN THE BERYLLIUM CORPORATION, NEW YORK (A DELAWARE CORPORATION), HEREINAFTER REFERRED TO AS "B. C.", PARTY OF THE FIRST PART, AND SIEMENS & HALSKE A. G., BERLIN-SIEMENSSTADT, TOGETHER WITH HERAEUS-VACUUMSCHMELZE A. G., HANAU, HEREINAFTER COLLECTIVELY REFERRED TO AS "S. H. H. V.", PARTY OF THE SECOND PART

Wherein it is mutually agreed between the parties hereto as follows:

The parties hereto agree to cooperate in the entire field of beryllium to the fullest possible extent and to mutually assist each other in every possible way through

advice, exchange of information and experience, assistance with regard to patents making available to the other party all patents, patent applications, trademarks, and similar rights relating to the entire field of beryllium, beryllium alloys, beryllium compounds, beryllium salts or products, hereinafter for brevity collectively termed "beryllium", or methods, processes, machinery, equipment and tools and appliances for their manufacture now or hereafter owned or controlled or in which it may have a licensable interest and to the extent of such licensable interest and by every other technical, business or legal manner possible subject nevertheless to the provisions of this agreement.

1. The parties hereto agree that the entire continent of America is the exclusive territory of B. C. and that the entire continent of Europe is the exclusive territory of S. H. H. V. Concerning the other countries agreements will be made from year to year, subject nevertheless to the provisions of paragraph 4 hereof.

2. During the term of this agreement, and solely for the field of beryllium, each party hereto grants to the other party, for the exclusive territory of such other party, the sole and exclusive right and license, including the right to sublicense for the term of this agreement:

to use or cause to be used methods and processes; to make, sell or cause to be made and sold beryllium; to use or cause to be used methods, processes, machinery, equipment, tools and appliances for the manufacture of beryllium;

all in accordance with or embodying inventions and improvements disclosed in the patents, patent applications or renewals (as set forth in schedules 1 or 2 hereunto annexed, as being the property of such granting party) or based on the patents, discoveries, practices or similar rights of such granting party, although not set forth in schedules 1 or 2; including all other rights relating to beryllium, now or hereafter acquired, owned or controlled by such granting party (and, if a licensable interest, to the extent of such licensable interest).

Formal exclusive licenses will, upon request of the party entitled thereto, be executed and delivered to the other party (subject to the provisions of paragraph 5).

Included in such rights granted by each party to the other is the right to dispose of every product of beryllium in any manner it sees fit during the term of this agreement.

During the term of this agreement new patents and patent applications will be made known to the other party within a period of three months from the date of the application filed.

Each party, furthermore, agrees to promptly make known to the other all actions and communications with the German or American patent office—as the case may be. Each party agrees to inform the other party hereto, quarterly, in sufficient detail concerning all improvements, discoveries, methods, processes and applications in the trade and experience in the business, so that the other party may be placed in a position to formulate its opinion with respect to the importance thereof.

3. Each of the parties hereto agrees to refrain from producing or making sales directly or indirectly in the exclusive territory of the other, and, throughout the world from assisting third parties in producing beryllium except subject to the provisions of this agreement. It is understood, however, that no control can be exercised concerning the sale of finished products by other concerns.

4. With respect to countries outside the exclusive territory each party hereto authorizes the other to make use of its patent applications, patents, or similar rights in connection with export trade from the exclusive territory and for the purpose of finishing the semi-finished products produced in the exclusive territory.

In the event that either party hereto desires to erect a plant, outside the reserved territories, employing the use or application or patent applications, patents or similar rights of the other party, or to grant sublicenses with respect thereto, such patent and other rights may be used or such sublicenses may be granted only with the consent of the other party hereto.

5. In the event of the termination of this agreement for any reason each party hereto is completely revested with all of its patent and similar rights and the other party retains no right or license of any nature or description with respect thereto; licenses are likewise terminated and each party agrees forthwith to cause all such licenses to be cancelled of record and the rights theretofore granted to be retransferred to the other party.

6. All costs and expenditures in connection with patent applications and patents in the exclusive territory are to be borne by the party entitled to such exclusive territory. Should such party be unwilling to pay these costs, the other party is privileged to defray them, in which latter event the party refraining from making

such payment shall have no further right with respect to such patent applications and patents.

7. Each party can itself take the necessary steps to defend or prosecute infringements of patents originating with it. In the event of its refusal so to do, the other party is authorised to undertake such action on its own behalf and to receive and retain any damages recovered.

A patent of one of the parties hereto which has been defended against attacks by third parties at the expense of the other party, belongs to the party paying the costs of protecting the same, provided, that the other party is reimbursed for the costs previously incurred in connection with such patent.

In connection with such proceedings each party agrees to assist the other to the best of its ability. If such assistance entails disbursements they are to be repaid by the other party.

In the event that the conduct of any proceeding requires the execution of formal papers by one party or the other, such papers shall be executed upon payment of any special disbursement in connection therewith.

8. In the event that expenditures are incurred in connection with the acquisition of inventions of third parties, or, in the event of payments being required to be made to employees, in special circumstances, by reason of legal requirements, the other party is privileged to acquire the exclusive right for its exclusive territory, upon payment of a fair proportion of the requisite expenditures. Should the other party refuse to pay such fair proportion of the expenditures, then the first party is entitled to dispose of all rights with respect to such invention, including the exclusive territory of such other party.

9. During the term of this agreement each party agrees to respect all patent applications, patents and similar rights, the subject matter of this agreement, belonging to the other, and agrees to refrain from any acts or action which would injure such rights.

B. C. agrees to make to S. H. H. V. with respect to beryllium metal or beryllium alloy sold by it or by its sublicensee or sublicensees, in whatever form such beryllium metal or alloy may be sold, a payment of 5 per cent of the beryllium price. On its part S. H. H. V. agrees to make the B. C. with respect to beryllium metal or alloy sold by it or by its sublicensee or sublicensees in whatever form such beryllium metal or alloy may be sold, a payment of 4% of the beryllium price. The payments will be based upon the price which wholesale purchasers in the United States of America pay for the beryllium contained in the respective products. Sales or deliveries made to wholly owned or controlled or to controlling associated or affiliated companies for consumption are subject to the payments hereinbefore specified, provided, however, that only one such payment shall be due with respect to each amount of beryllium so sold or delivered. These prices for beryllium will be fixed by B. C. and changes thereof will be promptly communicated to S. H. H. V. Payments due to S. H. H. V. under the terms of this paragraph are to be made to Siemens & Halske A. G. Berlin.

A statement of the amounts due shall be mailed within 14 days after the end of each quarter annual period, and payment shall be made of the amount due within four weeks thereafter to the designated representative in the country of the paying party.

11. B. C. agrees to pay to Heraeus-Vacuumschmelze A. G., Hanau on Main, in the first two years of the agreement the sum of \$6,000 per annum and in the succeeding eight years during the continuance of this agreement the sum of \$7,200 per annum payable quarterly at the end of each quarter, the first payment being due and payable June 30th 1934.

For each month the average price of beryllium will be converted into gold dollars at the buying rate of 1.5 grams of gold on the London market, in accordance with the relationship of the paper dollar to the gold dollar on the last business day of said month, and the gold dollar price so calculated shall be the basis for computing the payments due by the respective parties.

The average price of beryllium shall be calculated according to the following formula

$$\frac{ax+by+cz}{a+b+c}$$

where a, b, c are quantities sold and x, y, z are the respective selling prices of such quantities.

13. B. C. will pay at the beginning of each year during the continuance of this agreement to Professor Dr. Stock the yearly sum of \$500 and to Dr. Kroll yearly

the sum of \$1,000, but only during the continuance of this agreement. This obligation continues only during the respective life times of Dr. Stock and Dr. Kroll, their heirs, next of kin or legal representatives will have no claim against B. C.; in return for these payments B. C. is entitled to receive for its exclusive territory during the term of this agreement the exclusive license under all patents and patent applications now existing or hereafter originating with Dr. Stock or Dr. Kroll in the field of beryllium, so long as such payments are made to Dr. Stock and/or Dr. Kroll, as the case may be.

Heraeus-Vacuumschmelze A. G. has granted exclusive rights for all countries for hypodermic needles, surgical needles, dental plates, dental instruments and hairsprings for watches—containing beryllium. Furthermore Heraeus-Vacuumschmelze A. G. has granted options for the acquisition of exclusive rights for main springs for clocks and watches and surgical knives. With respect to the foregoing fields rights can be granted by Heraeus-Vacuumschmelze A. G. to B. C. only by special arrangements with their licensees.

It is understood that Siemens & Halske A. G. has disposed of all of its rights relating to spark plugs.

15. In the event that one party wishes to procure from the other equipment, tools and drawings for same of any sort, in the field of beryllium, they will be provided during the continuance of the agreement at cost thereof to the other party; this provision includes the obligations of Heraeus-Vacuumschmelze A. G. to furnish to B. C. one or more vacuum furnaces upon payment of the applicable cost. It is understood that the right to use vacuum furnaces based upon designs of the second party is limited to the first party or to its wholly controlled or owned subsidiaries.

16. The term of this agreement is from April 1st 1934 to March 31st 1944 and is automatically extended from year to year thereafter unless terminated by a six months' notice to the other party. In the event of the failure of one of the parties hereto to perform the provisions hereof to be performed by it, the other party hereto is entitled to terminate and cancel this agreement unless such default shall have been made good within a period of sixty days from the time of notification of such default by the other party; such termination shall be without prejudice to the rights of the injured party to recover damages for the failure of the other party to perform this agreement.

17. Each party is obligated to pay the legal and governmental charges in its exclusive territory.

18. All disputes are to be settled exclusively through the customary judicial tribunals.

19. The interpretation of this agreement is governed by the English text.

20. This agreement shall bind and inure to the benefit of the parties hereto, their respective successors and assigns.

IN WITNESS WHEREOF the parties hereto have caused these presents to be executed by their proper officers, thereunto duly authorized, the 16th day of January 1934.

THE BERYLLIUM CORPORATION,
By ANDREW GAHAGAN, *President*.
SIEMENS & HALSKE A. G.,
By SCHWENN dp. Illig.
HERAEUS-VACUUMSCHMELZE A. G.,
By Dr. W. ROHN.

Attest

LEMUEL BANNISTER,
Assistant Secretary

[CORPORATE SEAL]

It is mutually agreed between the undersigned that clause numbered 10 in the Agreement between the parties hereto dated January 16, 1934 shall be eliminated and that effective January 1, 1939 the following Clause 10. shall be substituted therefor.

10. B. C. agrees to make to S. H. H. V. with respect to beryllium metal or beryllium alloy sold by it or by its sublicensee or sublicensees, in whatever form such beryllium metal or alloy may be sold, a payment of 2 per cent of the beryllium price. The payments will be based upon the price which wholesale purchasers in the United States of America pay for the beryllium contained in the respective products. Sales or deliveries made to companies wholly owned or controlled by B. C. or companies controlling B. C. or associated or affiliated with B. C. for consumption are subject to the payments of B. C. hereinbefore specified,

provided, however, that only one such payment shall be due with respect to each amount of beryllium so sold or delivered. The prices for beryllium will be fixed by B. C. and changes thereof will be promptly communicated to S. H. H. V. Payments due to S. H. H. V. under the terms of this paragraph are to be made to Heraeus-Vacuumschmelze, Aktiengesellschaft in Hanau. A statement of the amounts due shall be mailed within 14 days after the end of each quarter annual period and payment shall be made of the amount due within four weeks thereafter.

In all other respects said agreement is to remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their proper officers, thereunto duly authorized, on the dates below mentioned:

(signed) By THE BERYLLIUM CORPORATION,
ANDREW GAHAGAN, *President*.

By SIEMENS & HALSKE A. G.,
By HERAEUS-VACUUMSCHMELZE A. G.,

Attest:

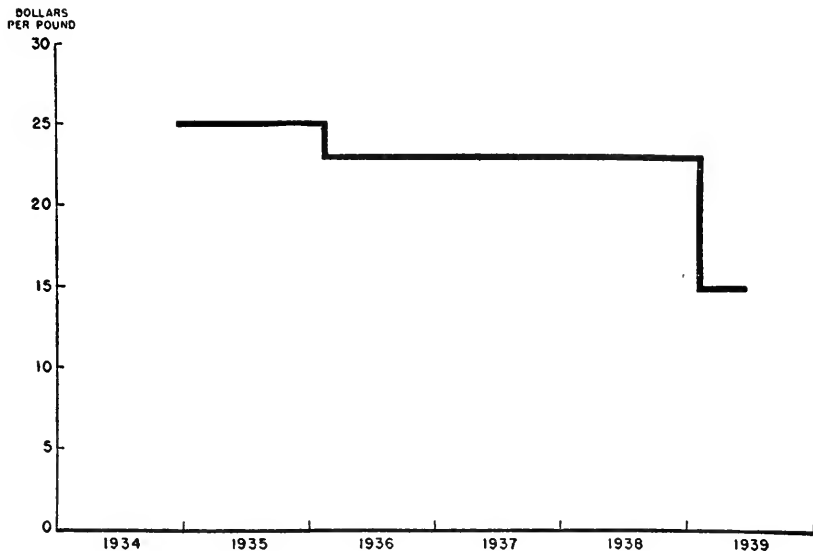
(Signed) LEMUEL BANNISTER, *Secretary*

Dated: Dec. 3rd, 1938.

EXHIBIT No. 482

PRICE OF BERYLLIUM*

(BRUSH BERYLLIUM COMPANY)



SOURCE: BRUSH BERYLLIUM COMPANY

* PRICE PER POUND OF CONTAINED BERYLLIUM METAL IN BERYLLIUM COPPER MASTER ALLOY

EXHIBIT No. 483

[Riverside Metal Co.—Report No. 1]

THE RIVERSIDE METAL COMPANY

RIVERSIDE, NEW JERSEY

Sales offices: 15 Maiden Lane, New York; 549 West Washington Blvd., Chicago; 2036 East 22nd St., Cleveland; 43 Farmington Ave., Hartford; Riverside, Burlington County, N. J.

Beryllium Copper Base Prices

Date	Sheet	Wire & Rod Under 2"	Sheet, Wire, and Rod	Date	Sheet	Wire & Rod Under 2"	Rod 2" and Over
Mar. 1, 1933.....			0.88	Aug. 22, 1935.....	0.96½	1.24½	0.96½
May 9, 1933.....			.89	Sep. 19, 1935.....	.97	1.25	.97
May 16, 1933.....			.89½	Oct. 27, 1936.....	.98	1.26	.98
May 29, 1933.....			.89½	Nov. 7, 1936.....	.98½	1.26½	.98½
May 31, 1933.....			.90½	Dec. 15, 1936.....	.99	1.27	.99
June 5, 1933.....			.91½	Dec. 31, 1936.....	1.00	1.28	1.00
July 5, 1933.....			.92½	Jan. 14, 1937.....	1.01	1.29	1.00
July 7, 1933.....			.93	Feb. 16, 1937.....	1.02	1.30	1.02
Aug. 4, 1933.....			.93½	Feb. 22, 1937.....	1.03	1.31	1.03
				Mar. 8, 1937.....	1.05	1.33	1.05
			Wire & Rod	Mar. 31, 1937.....	1.06	1.34	1.06
				Apr. 6, 1937.....	1.05	1.33	1.05
				Apr. 20, 1937.....	1.04	1.32	1.04
				Oct. 26, 1937.....	1.03	1.31	1.03
				Nov. 23, 1937.....	1.02	1.30	1.02
Dec. 11, 1933.....	0.91½		0.91	Jan. 20, 1938.....	1.12	1.30	1.12
Dec. 21, 1933.....	.91½		.91½	Jan. 28, 1938.....	1.115	1.295	1.115
Apr. 12, 1934.....	.92		.91½	May 20, 1938.....	1.105	1.285	1.105
June 13, 1934.....	.92½		.92	July 5, 1938.....	1.11	1.29	1.11
Oct. 30, 1934.....	.92½		.92	July 25, 1938.....	1.1125	1.2925	1.1125
			Rod 2" and Over	Sep. 19, 1938.....	1.115	1.295	1.115
				Oct. 10, 1938.....	1.11875	1.29875	1.11875
				Oct. 13, 1938.....	1.12	1.30	1.12
				Apr. 20, 1939.....	1.11	1.29	1.11
Feb. 25, 1935.....	.97	1.25	0.97				
June 28, 1935.....	.96	1.24	.96				

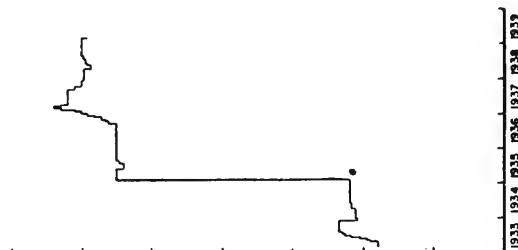
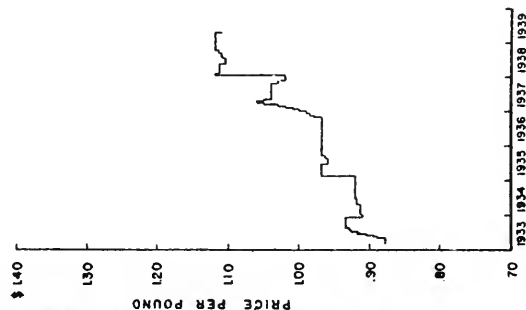
EXHIBIT No. 484

PRICE OF BERYLLIUM COPPER PRODUCTS (THE RIVERSIDE METAL CO.)

SHEET METAL

WIRE

RODS



PREPARED BY THE BUREAU OF INVESTIGATION
OF THE FEDERAL BUREAU OF INVESTIGATION
ECONOMIC COMMITTEE

AS SUBSEQUENT TO THIS DATE PRICE IS FOR RODS UNDER 2 INCHES IN DIAMETER
SOURCE: THE RIVERSIDE METAL CO

EXHIBIT No. 485

[Riverside Metal Co.]

No. 9

STATEMENT OF PRICE POLICIES

The price schedules issued by THE RIVERSIDE METAL COMPANY are contingent upon the prices published by the larger units of the Industry. From time to time these larger units publish their scale of prices, and our Company has no alternative except to meet such published prices in order to compete.

APRIL 13, 1939.

EXHIBIT No. 486

[Copy from files of The American Brass Co.]

MAY 10TH, 1933.

BRUSH BERYLLIUM COMPANY,
3715 Euclid Ave., Cleveland, Ohio.
(Attn. Mr. C. B. Sawyer.)

GENTLEMEN: This will acknowledge your favor of the 6th in reply to our night letter.

We are of course interested in obtaining our Beryllium requirements to the best advantage. Beryllium copper, commercially, is a new development with us and seems to be making some headway. Up to the present time, we have been ordering in one ton lots of the so-called Master alloy, containing roughly 12½% copper, and these orders have been fairly regular, and should, with natural development, increase, and would of course rapidly increase were we able to reduce the price on our product, which is only possible through obtaining a lower price on the Beryllium Master alloy.

Our technical people do not seriously object to the percentage of iron shown in the representative analysis which we sent you with our letter of March 29th, and if you feel you can develop an alloy containing anywhere from 10 to 30% Beryllium, the balance copper, with iron not to exceed the figure shown in our letter, that is .12, we will be very glad to have you quote us price in ton lots. For your further information, this price would have to be \$20.00 per lb. or less, for the Beryllium content of the alloy, to be of interest to us.

It has been the thought of those investigating this question that it will be possible ultimately to improve methods of manufacture to produce Beryllium copper at a sufficiently low price to make a more universal demand for the product.

We will be very glad to hear from you further in this matter as soon as you are in a position to give us definite information.

Yours very truly,

Agent for Purchases & Transportation.

HTM:MW.

EXHIBIT No. 487

[From files of The American Brass Co.]

CC to Mr. H. C. Jennison.

Nov. 2ND, 1934.

Mr. C. B. SAWYER,
Brush Beryllium Co.,
3715 Euclid Ave., Cleveland, Ohio.

DEAR SIR: As per conversation with you yesterday, a further investigation on the part of Mr. Jennison and our manufacturing people would indicate that we will be in a position to furnish you with copper shot for use in your process for making Beryllium copper. We understand that as soon as you are able, you will send us a lot of 300 lbs. or more of Beryllium copper alloy, and if possible, this alloy should contain over 3½% Be. We will be glad to have you advise us just as soon as you are ready to start making up this lot, and we will send you on memorandum, no charge, the necessary amount of copper shot to make up this sample lot.

Of course, we understand that the whole proposition is still in the experimental stage, but that the sample which you submitted to our laboratory would appear to be satisfactory and of interest to us. Mr. Jennison is perfectly willing to work with you through our laboratory to help you as far as possible in obtaining a satisfactory alloy, so that we may have an additional source of supply.

As explained to you, we would not wish you to go to the expense of fitting up to make this alloy in larger quantities until further progress has been made, and then any such enlarging of facilities would necessarily be your own responsibility, we on the other hand being anxious to establish additional sources of supply for this metal.

Naturally our desire is to reduce the present price of \$25.00 per lb. of Beryllium content so that the use of this product may be extended further than at the present time. There is no question in our minds but that a reduction in price would greatly stimulate the demand.

In order that our records in this department may be complete and in line with our regular system of procedure, we would reiterate what Mr. Jennison told you when you were here, that is, that absolutely all correspondence should be sent to this department, we in turn transmitting same, when necessary, to Mr. Jennison

and thence to the laboratory. Past experience has shown that any other method of handling creates misunderstanding and confusion.

Awaiting your further advices in this matter, and trusting that you will be able very soon to give us encouraging news particularly as to the actual production of the 300 lb. sample lot, we remain,

Yours very truly,

HTM:MW

Agent for Purchases & Transportation.

EXHIBIT No. 488

[Copy from files of The American Brass Co.]

THE AMERICAN BRASS CO.,
Waterbury, Conn., Nov. 12th, 1934.

Mr. C. B. SAWYER,
Brush Beryllium Corp.,
3715 Euclid Ave., Cleveland, Ohio.

DEAR SIR: This will acknowledge your day letter, and we have wired you in reply as per confirmation herewith.

In talking with our people at Ansonia, where this copper shot is made, would say that our demand for this particular product is not very large, but of course we can make it in any quantities required. I believe at the present time we are only selling about 5,000 lbs. per month. It is also possible that with a little experimenting we could make it so that it would run smaller in size, should there be a sufficient demand.

For your information, our situation seems to be slightly relieved in that we are getting little larger shipments from our regular source of supply, but we have not yet received sufficient quantities of Beryllium to warrant our looking for new business. Apparently there is quite a demand at the present time, which we are rather afraid to encourage until we are assured of a better supply of raw material.

I still would reiterate what I said to you the last time you were here, that a reduction in price would undoubtedly greatly increase the demand. We are stressing this point because that demand is bound to come sooner or later, and with it, a requirement for a considerably greater quantity of Beryllium than is being produced today.

We are, of course, greatly interested in receiving from you for practical test, a sufficient amount of alloy so that we may determine the adaptability of your product to our processes.

Yours very truly,

HTM:MW
Enc.

Agent for Purchases & Transportation.

EXHIBIT No. 489

THE AMERICAN BRASS COMPANY,
April 25, 1939.
*Beryllium copper*¹ (price per lb.)

Date	Sheet metal		Wire		Rods	
	Base price	Disc. extras	Base price	Disc. extras	Base price	Disc. extras
1932:						
June 15.....	78.36¢	25%----	78.86¢	25%----	78.36¢	25%----
July 8.....	84.60	25%----	85.10	25%----	84.60	25%----
Dec. 9.....	85.00	25%----	85.50	25%----	85.00	25%----
1933						
Jan. 2.....	85	33 1/4%----	85 1/4	33 1/4%----	85	33 1/4%----
Feb. 1.....	85	Net.....	85 1/2	Net.....	85	Net.....
Feb. 20.....	88	Net.....	88	Net.....	88	Net.....
Mar. 1.....	88	Net.....	88	Net.....	88	Net.....
Mar. 10.....	88	Net.....	88	Net.....	88	Net.....
Mar. 15.....	88	Net.....	88	Net.....	88	Net.....
Apr. 22.....	88 1/2	Net.....	88 1/2	Net.....	88 1/2	Net.....
May 3.....	88 3/4	Net.....	88 3/4	Net.....	88 3/4	Net.....

¹ Schedules prepared by Representatives of the Temporary National Economic Committee from material submitted by The American Brass Company.

Beryllium copper (price per lb.)—Continued

Date	Sheet metal		Wire		Rods	
	Base price	Disc. extras	Base price	Disc. extras	Base price	Disc. extras
1933:						
May 9.....	89 ⁶ / ₄	Net.....	89 ⁶ / ₄	Net.....	89 ⁶ / ₄	Net.....
May 16.....	89 ¹ / ₄	Net.....	89 ¹ / ₄	Net.....	89 ¹ / ₄	Net.....
May 29.....	89 ¹ / ₄	Net.....	89 ¹ / ₄	Net.....	89 ¹ / ₄	Net.....
May 31.....	89 ¹ / ₄	Net.....	89 ¹ / ₄	Net.....	89 ¹ / ₄	Net.....
June 5.....	91 ³ / ₄	Net.....	91 ³ / ₄	Net.....	91 ³ / ₄	Net.....
July 5.....	91 ³ / ₄	Net.....	91 ³ / ₄	Net.....	91 ³ / ₄	Net.....
July 7.....	92 ² / ₄	Net.....	92 ² / ₄	Net.....	92 ² / ₄	Net.....
Aug. 4.....	93 ¹ / ₄	Net.....	93 ¹ / ₄	Net.....	93 ¹ / ₄	Net.....
Dec. 11.....	91 ¹ / ₄	Net.....	91	Net.....	91	Net.....
Dec. 19.....	91 ¹ / ₂	Net.....	91 ¹ / ₄	Net.....	91 ¹ / ₄	Net.....
1934:						
Mar. 7.....	91 ¹ / ₂	Net.....	91 ¹ / ₄	Net.....	91 ¹ / ₄	Net.....
Mar. 19.....	91 ¹ / ₂	Net.....	91 ¹ / ₄	Net.....	91 ¹ / ₄	Net.....
Apr. 12.....	91 ¹ / ₂	Net.....	91 ¹ / ₄	Net.....	91 ¹ / ₄	Net.....
June 12.....	92 ¹ / ₄	Net.....	92	Net.....	92	Net.....
Nov. 1.....	92 ¹ / ₄	Net.....	92	Net.....	92	Net.....
Nov. 19.....	92 ¹ / ₄	Net.....	92	Net.....	92	Net.....
Nov. 24.....	92 ¹ / ₄	Net.....	92	Net.....	92	Net.....
					2" & larger	Under 2"
1935:						
Feb. 6.....	97	Net.....	\$1. 25	Net.....	97 ⁶ / ₄	\$1. 25
May 7.....	97	Net.....	1. 25	Net.....	97 ⁶ / ₄	1. 25
May 27.....						
June 27.....	96	Net.....	1. 24	Net.....	96	1. 24
Aug. 20.....	96 ¹ / ₂	Net.....	1. 24 ¹ / ₂	Net.....	96 ¹ / ₂	1. 24 ¹ / ₂
Sept. 17.....	97	Net.....	1. 25	Net.....	97	1. 25
Oct. 9.....	97	Net.....	1. 25	Net.....	97	1. 25
1936:						
Jan. 13.....	97	Net.....	1. 25	Net.....	97	1. 25
Apr. 14.....	97	Net.....	1. 25	Net.....	97	1. 25
May 4.....	97	Net.....	1. 25	Net.....	97	1. 25
July 22.....	97	Net.....	1. 25	Net.....	97	1. 25
Sept. 10.....	97	Net.....	1. 25	Net.....	97	1. 25
Oct. 27.....	98	Net.....	1. 26	Net.....	98	1. 26
Nov. 7.....	98 ¹ / ₂	Net.....	1. 26 ¹ / ₂	Net.....	98 ¹ / ₂	1. 26 ¹ / ₂
Dec. 15.....	99	Net.....	1. 27	Net.....	99	1. 27
Dec. 22.....	99	Net.....	1. 27	Net.....	99	1. 27
Dec. 31.....	\$1. 00	Net.....	1. 28	Net.....	\$1. 00	1. 28
1937:						
Jan. 11.....	1. 00	Net.....	1. 28	Net.....	1. 00	1. 28
Jan. 14.....	1. 01	Net.....	1. 29	Net.....	1. 01	1. 29
Feb. 16.....	1. 02	Net.....	1. 30	Net.....	1. 02	1. 30
Feb. 22.....	1. 03	Net.....	1. 31	Net.....	1. 03	1. 31
Mar. 8.....	1. 05	Net.....	1. 33	Net.....	1. 05	1. 33
Mar. 31.....	1. 06	Net.....	1. 34	Net.....	1. 06	1. 34
Apr. 6.....	1. 05	Net.....	1. 33	Net.....	1. 05	1. 33
Apr. 16.....	1. 05	Net.....	1. 33	Net.....	1. 05	1. 33
Apr. 20.....	1. 04	Net.....	1. 32	Net.....	1. 04	1. 32
Apr. 29.....	1. 04	Net.....	1. 32	Net.....	1. 04	1. 32
May 19.....	1. 04	Net.....	1. 32	Net.....	1. 04	1. 32
Sept. 27.....	1. 04	Net.....	1. 32	Net.....	1. 04	1. 32
Oct. 26.....	1. 03	Net.....	1. 31	Net.....	1. 03	1. 31
Nov. 23.....	1. 02	Net.....	1. 30	Net.....	1. 02	1. 30
1938:						
Jan. 20.....	1. 12	Net.....	1. 30	Net.....	1. 12	1. 30
Jan. 28.....	1. 11 ¹ / ₂	Net.....	1. 29 ¹ / ₂	Net.....	1. 11 ¹ / ₂	1. 29 ¹ / ₂
Mar. 14.....	1. 11 ¹ / ₂	Net.....	1. 29 ¹ / ₂	Net.....	1. 11 ¹ / ₂	1. 29 ¹ / ₂
May 20.....	1. 10 ¹ / ₂	Net.....	1. 28 ¹ / ₂	Net.....	1. 10 ¹ / ₂	1. 28 ¹ / ₂
July 1.....	1. 11	Net.....	1. 29	Net.....	1. 11	1. 29
July 5.....	1. 11	Net.....	1. 29	Net.....	1. 11	1. 29
July 22.....	1. 11	Net.....	1. 29	Net.....	1. 11	1. 29
July 25.....	1. 11 ¹ / ₄	Net.....	1. 29 ¹ / ₄	Net.....	1. 11 ¹ / ₄	1. 29 ¹ / ₄
July 29.....	1. 11 ¹ / ₄	Net.....	1. 29 ¹ / ₄	Net.....	1. 11 ¹ / ₄	1. 29 ¹ / ₄
Sept. 14.....	1. 11 ¹ / ₄	Net.....	1. 29 ¹ / ₄	Net.....	1. 11 ¹ / ₄	1. 29 ¹ / ₄
Sept. 19.....	1. 11 ¹ / ₂	Net.....	1. 29 ¹ / ₂	Net.....	1. 11 ¹ / ₂	1. 29 ¹ / ₂
Oct. 5.....	1. 11 ⁵ / ₈	Net.....	1. 29 ⁵ / ₈	Net.....	1. 11 ⁵ / ₈	1. 29 ⁵ / ₈
Oct. 6.....	1. 11 ³ / ₄	Net.....	1. 29 ³ / ₄	Net.....	1. 11 ³ / ₄	1. 29 ³ / ₄
Oct. 10.....	1. 11 ³ / ₄	Net.....	1. 29 ³ / ₄	Net.....	1. 11 ³ / ₄	1. 29 ³ / ₄
Oct. 12.....	1. 12	Net.....	1. 30	Net.....	1. 12	1. 30
Oct. 14.....	1. 12	Net.....	1. 30	Net.....	1. 12	1. 30
Dec. 14.....	1. 12	Net.....	1. 30	Net.....	1. 12	1. 30
1939:						
Apr. 10.....	1. 12	Net.....	1. 30	Net.....	1. 12	1. 30
Apr. 19.....	1. 12	Net.....	1. 30	Net.....	1. 12	1. 30
Apr. 20.....	1. 11	Net.....	1. 29	Net.....	1. 11	1. 29

* N. R. A. Code period started.

* N. R. A. unconstitutional.

EXHIBIT No. 490

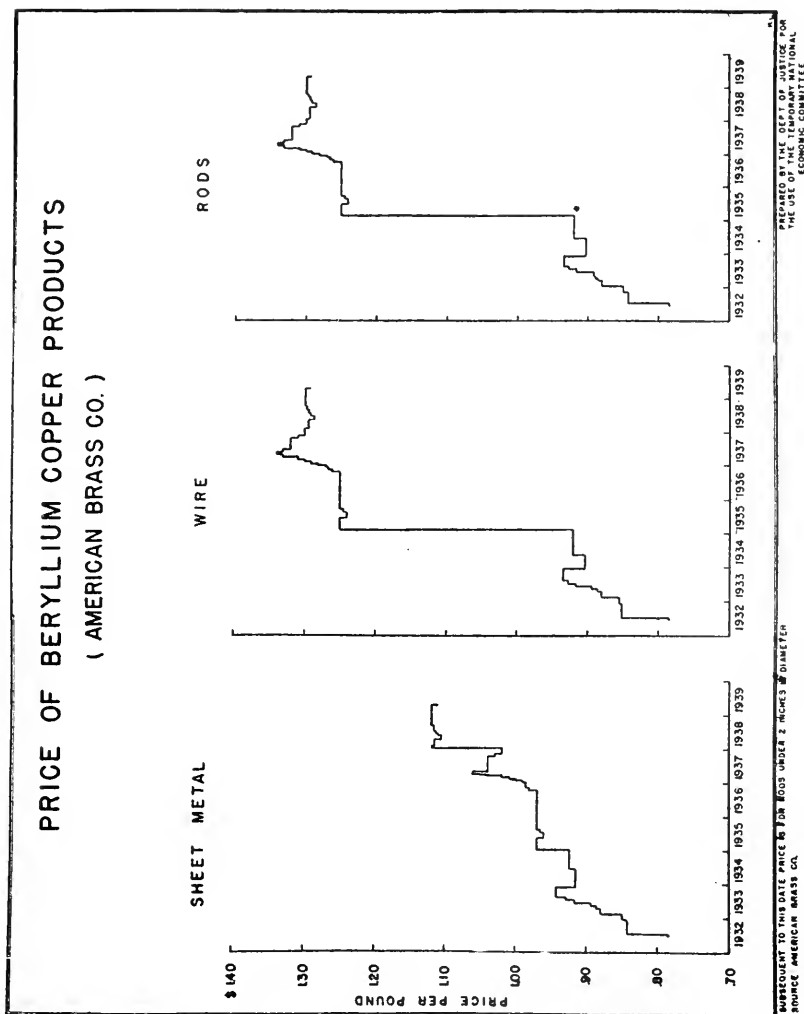


EXHIBIT No. 491

[Copy from files of The American Brass Co.]

From—The Riverside Metal Company.
To—The American Brass Company.

MAY 3, 1933.

Mr. FRANK WEAVER,
The American Brass Company,
Waterbury, Connecticut.

DEAR FRANK: I am assuming that if you make any changes in the base price of Beryllium Copper, you will not neglect to notify us of any such changes.

Very truly yours,

_____, President.

M.

EXHIBIT No. 492

[Copy from the files of The American Brass Co.]

From—The American Brass Company.
To—The Riverside Metal Company.

MAY 5, 1933.

Mr. H. LEE RANDALL,
President, The Riverside Metal Company,
Riverside, N. J.

DEAR LEE: Mr. Weaver has asked me to acknowledge your letter of May 3rd, regarding the published base price on Beryllium Copper. For your information, based on the price change of May 3d, published price of Beryllium Copper Sheet Metal is 88 $\frac{3}{4}$ ¢ per lb.; Wire, 88 $\frac{3}{4}$ ¢; Rods 88 $\frac{3}{4}$ ¢; Tube, 93 $\frac{3}{4}$ ¢.

All of the above are on a hundred pound items basis, with triple the brass small quantity extras on less than 100 lbs.

If we were to quote you on items of 1000 pounds per size we would reduce the above base prices by 3¢ per pound.

Extras for size are the same as net Phosphor Bronze extras, as shown in our catalogue.

We trust this is satisfactory.

Yours very truly,

THE AMERICAN BRASS COMPANY,
Signed JOHN A. COE, Jr.,
General Sales Manager.

JAC:W

EXHIBIT No. 493

[Copy from the files of The American Brass Co.]

From—The Riverside Metal Company.
To—The American Brass Company.

MAY 9, 1933.

Mr. JOHN A. COE, Jr.,
The American Brass Company,
Waterbury, Connecticut.

DEAR JOHN: Thank you for your letter of May 5th, relative to change in price of Beryllium Copper products.

We understand you will keep in touch with any changes which may be made in this commodity.

Very truly yours,

THE RIVERSIDE METAL COMPANY,
_____, *President.*

M.

EXHIBIT No. 494

[From files of The American Brass Co.]

THE RIVERSIDE METAL COMPANY

RIVERSIDE, NEW JERSEY

Sales Offices: 15 Maiden Lane, New York; 549 W. Washington Blvd., Chicago; 2036 East 22nd St., Cleveland; 43 Farmington Ave., Hartford; Riverside, Burlington County, N. J.

NOVEMBER 8, 1934.

Mr. H. L. KILBORN,
The American Brass Company,
Waterbury, Connecticut.

DEAR HI: We have your letter of November 5, and it is quite agreeable to us to await your action in connection with price on Beryllium Copper Hexagon rod.

We have appreciated, of course, that the manufacture of items in Beryllium Copper is not at all inexpensive and we only wanted to place ourselves in a position to be able to figure on such items as we can [not H. L. R.] at the present time manufacture.

We will leave it up to you to let us know when you care to make any change in your present set-up:

Very truly yours,

THE RIVERSIDE METAL COMPANY,
H. L. RANDALL, *President*.

M.

Penciled notations enclosed in brackets.

EXHIBIT No. 495

[From files of The American Brass Co.]

THE RIVERSIDE METAL COMPANY

RIVERSIDE, NEW JERSEY

Sales Offices: 15 Maiden Lane, New York; 549 W. Washington Blvd., Chicago; 2036 East 22nd St., Cleveland (43 Farmington Ave., Hartford; Riverside, Burlington County, N. J.

OCTOBER 4, 1935.

Mr. CLARK JUDD,

*The American Brass Company,
Waterbury, Conn.*

DEAR CLARK: It is my understanding that Beryllium master alloy is now \$30.00 per pound for contained beryllium, and according to our figures this increases the alloy cost of the 2¼% Beryllium by .113 per pound over what it would be at \$25.00 per pound for contained beryllium.

Under the circumstances, do you not think some thought should be given to the matter of base prices?

Very truly yours,

H. L. RANDALL, *President*.

M.

(In ink:) We are paying Ber. Corpn. \$30.00 & another source \$23—avg. of \$26.50. With early prospects of \$20 or less we should be reducing before long, instead of advancing. Perhaps Randall should be advised of situation. E. M. P.

EXHIBIT No. 496

THE AMERICAN BRASS COMPANY

[From files of The American Brass Co.]

COPPER AND BRASS PRODUCTS

Waterbury, Conn., U. S. A.

DEPARTMENT OF
PURCHASES AND
TRANSPORTATION

MARCH 1ST, 1939.

Personal & Confidential.

Dr. C. B. SAWYER,

*Brush Beryllium Co.,
3714 Chester Ave., Cleveland, Ohio.*

DEAR DR. SAWYER: Confirming telephone conversation of yesterday afternoon, there was a meeting held yesterday morning in the office of Mr. Judd,—present at this meeting being Mr. F. E. Weaver, Vice Pres. in charge of Sales Promotion, Mr. John A. Coe, Jr., Sales Mgr., Mr. E. M. Pendleton, Act. Vice Pres. Torrington-Waterbury Branches, Mr. J. R. Freeman, Jr., Mr. Davis, Mr. Bedworth, Chief Sales Engineer, Mr. Hopkins, Cost Accountant, Mr. Schneider, Sales Engineer, New York Office. This meeting lasted about two hours. There was a thorough discussion of the Beryllium Copper situation at the present time.

The principal developments of the meeting were that we lost a very considerable amount of money on Beryllium Copper last year, as we have ever since we have attempted to make this alloy. This loss occurred, unfortunately, on metal shipped

to our largest customer, largely due to the very rigid specification and tolerances required to meet this customer's requirements. Also, losses on small lots of say under 100 lbs. Certain sizes of sheet, the rod business and wire business showed satisfactory profits, but the volume was very small compared with the other items mentioned above, and the net result was a very substantial red figure.

Mr. Schneider apparently has had several calls in the New York office from the Beryllium Corp. including one from Mr. Whitney, and had gained the impression that they would be willing to make a substantial reduction in price in order to stimulate business. In other words, they are thinking somewhat along the same lines as you are. Mr. Judd advised him that our obligations are with you; that you had already discussed this matter with us, and that we could not discuss it with the Beryllium Corp.

It was finally decided that we would give this question serious sales promotion consideration for about six months, sending out a competent technical man with the sales engineer or salesman, to make a survey of the field and report to us at the end of the period, interest shown by various industries who might become consumers of the alloy in appreciable amounts, such as Bell Laboratories, American T. & T. the automobile industry, aircraft industry and electrical industry.

It is proposed to make a revision in our prices based on the reduction of the Master Alloy to \$15.00 a pound for Beryllium content,—at the same time either leaving alone or raising prices on those items which have proven the most uneconomical,—that is, smaller quantities,—and thoroughly go over the requirements of our largest customer with a view to either having them modify their specification, or having them accept a price which would show us some profit or at least let us break even.

Our people will endeavor to gather from the various contacts they make if there would be a demand at an even lower price, and for an alloy having different characteristics, but selling at a price approximating that of Trodalloy or phosphor bronze. In other words, a thorough survey of the possibilities of Beryllium Copper alloys which we might manufacture.

Our present feeling, after talking with Charlie Davis is that we could not attempt to make the alloy that you and he have considered, and coming under the Corson patents, due to the fact that while the alloy value of this mixture is very low compared with the Silliman mixture, and the hot rolling characteristics are favorable, annealing and cleaning, and other operations would be impossible with our present equipment.

At the end of the six month period, if we should decide that we will discontinue the manufacture of this alloy, it is suggested that we license Riverside under the Silliman patent. There is no question but that they could get a license under the Corson patent. In doing this, we would be very frank with them and advise them that it was being done with the understanding that your Company would be favored with the Master Alloy requirements for this alloy, so long as your prices and quality are satisfactory.

I endeavored yesterday after I talked with you, to get in touch with Mr. Randall, and found that he is on a West Indies cruise, and not expected to return until March 6th.

In the meantime, we will have made up a tentative price schedule as mentioned heretofore, and then make contact with Mr. Randall, and lay the cards on the table with him. Our people feel very strongly that no move should be made, and no publicity given to the new price, until the matter has been thoroughly discussed with Mr. Randall.

Of course, if we should decide to discontinue the business, we would naturally give our trade at least six months' notice, so that they might make arrangements to obtain their requirements from some other source.

You may be sure that we will keep you advised as soon as anything new develops.

With kindest personal regards,

Yours very truly,

H. T. MONTAGUE,
Agent for Purchases & Transportation.

HTM:MV.

P. S. Final figures on gross losses are really insignificant, taking all things into consideration. Our main losses have been due to the very rigid requirements of our largest customer.

EXHIBIT No. 497

THE AMERICAN BRASS COMPANY

[Copy from files of The American Brass Co.]

COPPER AND BRASS PRODUCTS

Waterbury, Conn., U. S. A.

DEPARTMENT OF
PURCHASES AND
TRANSPORTATION

MARCH 10TH, 1939.

Personal.

Dr. C. B. SAWYER,
Brush Beryllium Co.,
3714 Chester Ave., Cleveland, Ohio.

DEAR DR. SAWYER: This will acknowledge yours of the 8th, in relation to discrepancy in analyses of Beryllium content of dross. Mr. Davis is away this week, but I will pass on your letter to him upon his return.

Mr. John A. Coe, Jr. and Mr. Pendleton saw Mr. Lee Randall in New York yesterday, and they put up to him the question of what he would do should there be a reduction in the price of Master Alloy. They did not tell him that you propose any such reduction, but used as a basis the fact that there has been, as you know, more or less independent talk among others that the Master Alloy could be produced for a good deal lower than the present price. Mr. Randall seems to feel very much as though a reduction in price was not even being thought of by the producers, from which it would appear that your competitors have not approached him, as apparently they approached Mr. Schneider in our New York office, with the suggestion that the price might be reduced.

Mr. Randall opined that part of such a reduction should be passed on to the trade, but that all of it could not be passed on, in view of the very heavy inventory of stock in works, scrap and other metal which is on hand at the \$23.00 price. A \$15.00 price for Beryllium content would mean a reduction of 18¢ a pound on the alloy value, and it is proposed tentatively to pass on 10¢, and hold the 8¢ until a good part of the present stock in works and other metal on hand is absorbed, when a further reduction would be considered. Mr. Randall, without committing himself, intimated that this would be satisfactory, but he wished to go back and look over his figures, and then would advise us whether he would be agreeable to such a change.

Apparently a large part of his business is in wire and rod, in which there is a very considerable profit, not only to him, but to us. The sheet situation, however, I imagine is about the same with him as it is with us. That is, large customers' specifications are so rigid that the costs are very high.

I have not seen Mr. Coe since this meeting, as he is still in New York, but will talk the matter over with him when he returns next week, and keep you advised.

In the meantime, if you have any suggestions, we will be glad to have them.

I don't think it would be wise to advise Mr. Randall of your \$15.00 price until we are ready to move, and it may be that at that time you will feel like advising Mr. Stannard, as a matter of courtesy, and a possible indication of better cooperation with him, as a representative of a different policy apparently proposed in handling the business of your competitor.

Yours very truly,

H. T. MONTAGUE,
Agent for Purchases & Transportation.

HTM:MW.

EXHIBIT No. 498

[From files of The American Brass Co.]

THE RIVERSIDE METAL COMPANY

RIVERSIDE, NEW JERSEY

Sales Offices: 15 Maiden Lane, New York; 549 W. Washington Blvd., Chicago; 2036 East 22nd St., Cleveland; 43 Farmington Ave., Hartford; Riverside, Burlington County, N. J.

AUGUST 12, 1935.

Mr. CLARK JUDD,
The American Brass Company,
Waterbury, Connecticut.

DEAR CLARK: I just wanted to drop you a line to thank you for your help in connection, principally, with matters pertaining to Beryllium-Copper.

I am planning to get in touch with Mr. Gahagan regarding the matter of his control of the German patent situation, and I think we will be able to get some complete evidence from their Company as to just what they do and just what they do not control.

I very much appreciate such information as you are sending me regarding the matter of costs for drawing Phosphor Bronze Wire. Such information will be very helpful, and will, I believe obviate the possibility of having to reduce wire prices generally.¹

Again thanking you very much for your consideration, I am

Sincerely yours,

H. L. RANDALL,
President.

M.

EXHIBIT No. 499

[Copy from files of The American Brass Co.]

THE AMERICAN BRASS COMPANY,
GENERAL OFFICES,
Waterbury, Conn., October 26, 1937.

Subject: Nickel Silver and Phosphor Bronze Flat Wire Extras.

Mr. J. A. COE, Jr.,
General Sales Manager,
Room #100 A, Building.

DEAR SIR: As you know, the above flat wire extras, as well as those for flat Everdur wire, are predicated by adding 8¢ list to the extras for round wire, using the thinner dimension for determining the round wire extras, whereas, brass and commercial bronze flat wire prices are figured by using list extras over wire base, these extras being divided into four divisions of width.

For some time we have realized the desirability of establishing similar flat wire extras for phosphor bronze and nickel silver inasmuch as in certain cases our present method of figuring results in a lower extra for these refractory alloys than for the commercial brass and bronze alloys. Also, a consideration of costs indicates that the present extras are too low, particularly on the very narrow and thin sizes.

We are submitting for your approval a proposed and recommended list of flat wire extras for nickel silver and phosphor bronze, and would also suggest that inasmuch as extras for Everdur flat wire now follow those for phosphor bronze flat wire, the same change should be made in the Everdur list.

The writer has gone over this matter with Mr. John Hopkins who fully concurs with the foregoing, and we might say that the list is as suggested by Mr. Lee Randall.

¹ Pencil notations in margin: "John Hopkins" and "J. H. 8/13/35."

If this meets with your approval we would be very glad to have steps taken to put the necessary changes into effect.

Very truly yours,

(Signed) H. L. K.,
Assistant Manager,
Torrington-Waterbury Branches.

CC:

E. M. Pendleton, Asst. V. P.
John Hopkins, Accountant

EXHIBIT No. 500

[From files of The American Brass Co.]

FEB. 1ST, 1939.

Beryllium Bronze

Mr. J. F. ACKERMAN,
Superintendent, Waterbury Branch.

DEAR SIR: One of the subjects which will probably be discussed in New York this week with our various Branch Vice Presidents will be the unsatisfactory condition of our Beryllium Bronze business, both as to the deficit which our past operations have rolled up and a seeming lack of prospective volume in this line of product. So far our sales volume has not been sufficient to support the time, energy, and money we have put into this material. The question is,—shall we give it up as a bad job?

Of course, our present chief source of supply—The Brush Beryllium Company—is vitally interested in our decision and they are willing to reduce the price of the master alloy by a sufficient margin to enable The American Brass Company to initiate a more extensive selling campaign. The question is,—is it worth our while to initiate a renewed selling drive?

The cost of the master alloy, however, is only one of two factors affecting the lack of return on this business; the other is our own cost of production. While I understand that our figures now show that we just about break even on the poundage produced, the fact remains that our present methods, particularly in the Casting Shop, are open to criticism from the cost standpoint. I am informed on good authority that the Riverside Metal Company have a very considerable edge on us in the casting shop cost, due to the almost entire elimination of drossing in their method of melting—they have no loss by dross to speak of. We are not informed as to their methods but are told that there is nothing revolutionary in it, and that, in fact, their methods have been in common use on other products for years. We are also told that the use of a Northrup electric furnace, or any furnace which agitates the charge during its molten state, is exactly the wrong method of melting, because of the resultant possibility of excess oxidation of the charge. We also know that the Brush Beryllium people in their own production of the master alloy have different ideas than we do and utilize a different type of melting facility.

I am told that the methods used in the Riverside plant are their own development and involve no licenses or patent complications. In other words, since they have eliminated dross they have apparently used their "bean" a little better than we have without spending very much money to do it.

The Riverside business is continually growing while our own is, if anything, diminishing. Part of this situation may be due to the restriction of our activities to the Silliman alloys, but quite probably it is also due to a lower cost than ours. In short, I believe that Mr. Randall considers the Beryllium business to be profitable and, therefore, is pushing it with much greater energy than we are. It seems to me it is time for us to consider our methods of manufacturing in the light of this information.

Yours very truly,

—————, Vice President.

CSJ:O'M.

Copy to Mr. F. N. Meyer.

Mr. J. R. Freeman, Jr.

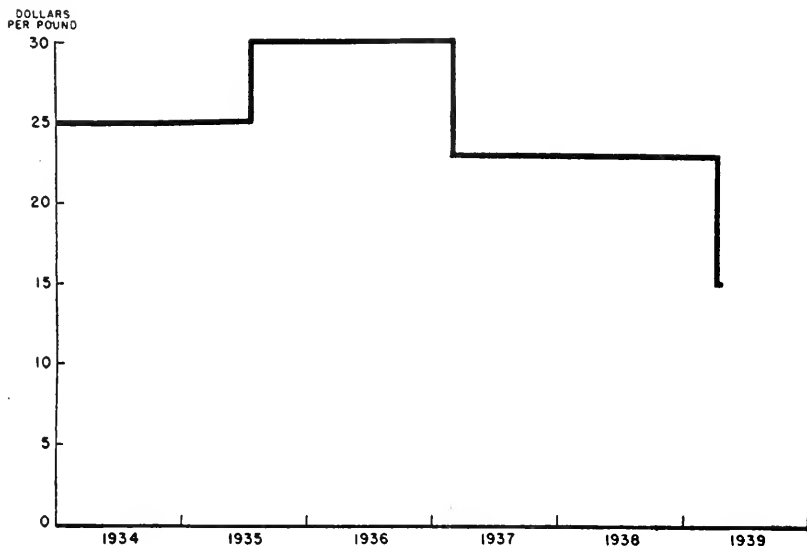
Mr. H. T. Montague.

Mr. John Hopkins.

EXHIBIT No. 501

PRICE OF BERYLLIUM*

(THE BERYLLIUM CORPORATION)



SOURCE: THE BERYLLIUM CORPORATION

*PRICE PER POUND OF CONTAINED BERYLLIUM METAL IN BERYLLIUM COPPER MASTER ALLOY

EXHIBIT No. 502

[Submitted by Beryllium Corp.]

Proposed Applications for Beryllium Copper

	High Strength	Corrosion	Wear	Stability	Conductivity	Non-magnetic	Formability	Heat resis.	Non-sparking
Automobile—									
Oil pressure release spring		X		X				X	
Distributor breaker spring	X	X		X	X			X	
Distributor Contact spring		X	X	X				X	
Timing advance spring	X	X		X				X	
Windshield wiper valve		X		X			X		
Typewriter—Key return spring	X			X					
Wiring devices—									
Sockets (contact blades)	X		X		X		X		
Plugs	X			X	X		X	X	
Switches	X		X		X		X		
Radio devices—									
Socket blades	X			X	X		X		
Trimming condensers					X		X		
Tube contact clips	X			X	X		X	X	
Motor controls—									
Contact blades	X	X		X	X		X	X	
Armature hinges			X			X			
Bearings—									
Locomotive "Brasses"	X		X					X	
Ball bearing retainers			X				X		
Seals (garter springs)	X	X		X					
Power Drives—									
Worm gears	X		X						
China sprockets	X	X	X					X	

EXHIBIT No. 502—Continued

Proposed Applications for Beryllium Copper—Continued

	High Strength	Corrosion	Wear	Stability	Conductivity	Non-magnetic	Formability	Heat resis.	Non-sparking
Electric Motors—									
Commutator Segments.....	X		X		X			X	
Brush springs.....	X		X	X	X			X	
Food Machinery—Cast valves, linkages, gears, guides, nozzles.....	X	X	X						
Pulverizers & Grinders—Blades.....	X	X	X						X
Chemical Equip.—									
Parts for mixers, shredders, heaters.....	X	X	X		X			X	
Valve seats.....	X	X	X					X	
Pump impellers.....	X	X	X					X	
Precision Devices.....									
Instrument springs.....	X			X	X	X	X		
Instrument bearings.....	X	X	X					X	
Diaphragms, Bellows.....	X	X		X	X		X	X	
Bimetals.....	X			X	X	X	X	X	
Clock hair springs.....	X			X					
Resistance welders—Electrodes.....	X		X		X			X	
Oil Burner nozzles.....		X	X		X			X	
Airplane—									
Oil lines.....	X	X							
Propeller hubs.....	X		X						
Diesel Engines—Injection plungers.....	X	X	X					X	
Camera—Shutter spring.....	X	X		X					
Electric vibrators.....	X		X					X	
Power plant equip.—Valve seats.....	X	X						X	
Appliances—Vacuum cleaner brush holders.....	X			X	X			X	
Gas pumps—Valves, springs.....	X	X	X			X			
Cable sockets.....	X	X							

Known Applications for Beryllium Copper

PRODUCT	REASONS FOR ADOPTION.
Paper making machinery.....	Non-sparking.
Temperature Sensitive Instruments.....	Fatigue strength.
Power plant equipment.....	Fatigue strength.
Car heating equipment.....	Fatigue.
Steam turbines.....	Fatigue.
Electric ranges.....	Strength, heat resistance.
Mills and Pulpers.....	Non-sparking, wear.
Grinding mills.....	Fatigue.
Gear reducers.....	Wear.
Aircraft instruments.....	Fatigue (Fatigue-hysteresis or stability).
Aircraft.....	Strength, wear, fatigue, finish.
Aviation equipment.....	Fatigue, corrosion.
Household appliance.....	Strength.
Household appliance.....	Fatigue.
Business Machines.....	Corrosion.
Radio.....	Fatigue (Fatigue-hysteresis or stability).
Automobile engines.....	Wear.
Centrifugal.....	Wear.
Aircraft.....	Strength, fatigue.
Magnetos.....	Strength, fatigue.
Pumps.....	Strength.
Water and Gas pumps.....	Fatigue, non-sparking.
Cable fittings.....	Strength, corrosion.
Gasoline pumps.....	Fatigue, corrosion, heat resis.
Pulverizing machinery.....	Non-sparking.
Electric vibrators.....	Heat resistance.
Instruments.....	Strength, corrosion.
Scales.....	Wear.

Known Applications for Beryllium Copper—Continued

PRODUCT	REASONS FOR ADOPTION.
Temperature measuring instruments.....	Corrosion, fatigue (Fatigue-hysteresis or stability).
Industrial measuring instruments.....	Strength, corrosion, wear.
Surgical instruments.....	Strength, stiffness.
Industrial measuring instruments.....	Fatigue (Fatigue-hysteresis or stability).
Elevators.....	Conductivity, fatigue.
Machine tools.....	Wear.
Steam turbines.....	Heat resistance.
Pressure reducing valves.....	Stiffness.
Power shovels.....	Strength.

SUPPLEMENTAL DATA

The following letter, introduced during hearings held May 12, 1939, is printed herewith in connection with testimony on p. 2027, supra.

EXHIBIT No. 538

METAL & THERMIT CORPORATION,
120 Broadway, New York, May 11th, 1939.

Beryllium.

Hon. JOSEPH C. O'MAHONEY,
*Chairman, United States Senate, Temporary National Economic Committee,
Washington, D. C.*

DEAR SIR: On May 8, 1939, at the hearing conducted by you as Chairman of the United States Senate Temporary National Economic Committee, you questioned me as to whether or not there were any subsidiary corporations of Metal & Thermit Corporation. At that time, you requested that I procure and forward to you a statement showing the names and capital structures of the subsidiary corporations of Metal & Thermit Corporation.

The aforesaid information is as follows:

AMERICAN RUTILE CORPORATION (A VIRGINIA CORPORATION)

Capital Stock

Authorized: 30,000 shares—Par Value \$10 each.

Issued and Outstanding:

15,960 shares—Par Value \$10 each (Voting).....	\$159,600. 00
4 shares (Original Issue) Par Value \$100 each (Non-voting).....	400. 00

Total.....	160,000. 00
------------	-------------

Metal & Thermit Corporation owns 15,960 shares par value \$10 each.

ANTIMONY CORPORATION (A NEW JERSEY CORPORATION)

Capital stock

Authorized: 1,000 shares—Par value \$5 each.

Issued and Outstanding: 1,000 shares Par Value \$5 each (Voting),
\$5,000.00.

Metal & Thermit Corporation owns 1,000 shares of the par value \$5 each.

Metal & Thermit Corporation also has a substantial stock interest in two other corporations, American Zirconium Corporation and Chromium Corporation of America, which, however, are not subsidiaries.

(1) AMERICAN ZIRCONIUM CORPORATION (A MARYLAND CORPORATION)

Capital Stock

Authorized:

6,000 shares Preferred Stock—Par Value \$100 each.

20,000 shares Common Stock without Par Value.

Metal & Thermit Corporation owns 6,800 shares of the Common Stock without Par Value.

(2) CHROMIUM CORPORATION OF AMERICA (A DELAWARE CORPORATION)

Capital Stock

Authorized:

5,000 shares 7% Cumulative Preferred—Par Value \$100 each.

7,000 shares Second Preferred—Without Par Value.

1,000 shares Common—Without Par Value.

Metal & Thermit Corporation owns

1,193 shares 7% Cumulative Preferred Stock—Par Value \$100 each.

2,028 shares Second Preferred Stock—Without Par Value.

500 shares Common Stock—Without Par Value.

I trust that the foregoing information will be of assistance to you in your investigation.

Very truly yours,

F. H. HIRSCHLAND,
President—*Metal & Thermit Corporation*.

H:HS.

The following memorandum, introduced during hearings held May 22, 1939, is printed herewith in connection with testimony on p. 1826, supra.

EXHIBIT No. 598

[Federal Trade Commission]

MARCH 14, 1939.

MEMORANDUM FOR THE TEMPORARY NATIONAL ECONOMIC COMMITTEE

IN RE: THE RELATION OF CHAIN STORE GROSS MARGINS TO DISTRIBUTION COSTS AND NET PROFITS

Additional information is here furnished the Temporary National Economic Committee by the Federal Trade Commission at the request of Dr. A. Ford Hinrichs, member of the Committee, following the testimony of Col. William H. England in the afternoon session, March 3, 1939, in which he summarized the Commission's report on Agricultural Income.

Questions by Dr. Hinrichs were asked of the undersigned, member of the Commission's staff, regarding the high rate of return on investment shown by the Agricultural Income report for chain grocery stores and what that would indicate, if anything, as to buying and selling prices and distribution costs for particular commodities. Following an inquiry whether a large gross margin (share of consumers' dollar) would indicate excessive costs or large profits, the question was asked by Dr. Hinrichs:

"Would it be proper to have information on that point introduced into the record in connection with this presentation?"

The following statement is made on this and closely related questions:

The Agricultural Income report gives information bearing on the profitability of the operations of chain grocery stores as follows: (1) For a series of recent years for the entire business of the principal grocery chains the annual rate of net profit on investment and also on net sales; and (2) for approximately one year, the gross margin or share of consumers' dollar received by certain of these grocery chains on each of certain commodities, principally fresh fruits and vegetables, such margin being the difference between the average laid-down cost of a unit of such a commodity to the chain stores and its average net sale price and constituting

the provision with which to meet operating costs as well as to yield such stores a net profit in the amount of the residue, if any, after the payment of such costs. This information, however, as to both items, is published in this report in combined form for a group of chain store companies and is not shown separately for any one company, such as The Great Atlantic & Pacific Tea Company.

This gross margin for the retail grocer, including the grocery chain, being what it is, may not be taken as an index of the size of rate of net profit on investment or that on net sales, because (1) the net profit on which these rates are, in part, based is derived from the handling of numerous commodities (the grocer's entire line) while the gross margin or share of the consumers' dollar relates to but one commodity; (2) the amount of net profit included in the gross margin bears no fixed relation to the amount of operating costs included therein; and (3) the rate of net profit is itself a ratio between the amount of net profit and either investment or sales, which do not vary directly with the gross margin.

The Agricultural Income report shows very little as to the difference between the gross margin or share of the consumers' dollar received by grocery chains and that received by independent retailers, and nothing as to the proportions of this margin absorbed respectively by the distributors' operating costs and net profits. Had the underlying inquiry developed a sufficient basis for comparison of this gross margin of the chains with that of the independents for identical commodities, it would be possible, where this margin of the one is greater than that of the other, to show from such analysis as is made by this report whether the greater margin is accounted for by a lower average buying price or by a higher average selling price, or by both. There would still remain, however, in such a comparison of prices for the two groups, the troublesome questions of identity of grades, sizes, quality, etc., of relative quantities purchased in periods of high and low prices, and of differences in localities where purchases were made and in markets where commodities were sold, these and other like factors making for differences in average prices.

The foregoing statement is based upon the data found in the Agricultural Income report. The Commission's report on its Chain Store Inquiry affords more extensive and detailed information and a more satisfactory comparison of the operations of chains and independents, although the information is for a period several years earlier.

In this earlier inquiry the average gross margins for so-called independent and chain grocery stores in each of four representative cities were ascertained for a very large number of identical commodities. The combined gross margin for all these commodities for each city was found to be larger for independents than for grocery chains, although for a number of commodities taken separately the margins were larger for grocery chains than for independents. The facts (so far as ascertained) which were significant with respect to this result were as follows:

a. The grocery chains both bought and sold these commodities on the whole at somewhat lower average prices, but the selling prices were relatively lower than the buying prices, making for a smaller combined margin for the grocery chains on this group of commodities than for the independents.

b. The average quality of these commodities was found to be much the same for grocery chains and independents.

c. The grocery chains generally were not giving credit or delivery service, while the independents commonly were.

d. The rate of wages paid employees by grocery chains was generally lower than that paid by independents.

e. Grocery chains, more than independents, used loss-leader commodities sold at prices below the average cost of doing business plus the cost of the goods, and sometimes below the latter.

Respectfully submitted.

(Signed) G. A. STEPHENS.
(Typed) G. A. STEPHENS.

GAS:hp.

The following document, introduced during hearings held June 16, 1939, is printed at this point in connection with testimony on p. 2147, supra.

EXHIBIT No. 760

DECEMBER 28, 1937.

To Whom it May Concern:

I, C. B. Sawyer, make affidavit that the following is written by me and to the best of my recollection, is a true and complete account of the events therein related:

Memorandum of C. B. Sawyer of discussions between himself and Dr. Merlueb Sobel after the presentation of Sawyer's paper at the American Chemical Society Meeting in Cleveland, Tuesday, December 28, 1937

Sawyer's paper was the first on the program and was presented about 9 o'clock, in the morning.

Immediately after the presentation, upon the call of the chairman for discussion, Dr. Sobel jumped up and said that he had great admiration for the work of Dr. Sawyer, and his associates. He said, however, that he would be remiss in his duty as a consultant for the Beryllium Corporation of America if he did not say that his interpretation of the patent situation differed from that of Sawyer, and that the Masing and Dahl patents did cover ternary alloys. There was some other conversation in here which I cannot remember, but it led up to Dr. Sobel's statement that the Beryllium Corporation wished him to say that if any use was made of these patents which in their opinion constituted an infringement, it would result in a patent suit.

In my response which was made immediately in the full meeting I stated that I had anticipated comments of this sort from some representative of the Beryllium Corporation and that these were kinder than I had expected. There was immediately a burst of laughter from the audience. I then asked Dr. Sobel if he was familiar with the file history of the Masing & Dahl patent, and he replied that he was. I addressed the chairman and asked if I might read from the file history. Upon receiving his permission, I read as follows, stating that the remarks which I would read were made by Masing & Dahl's attorney: "Applicants have now canceled all reference to nickel from their application. The claims now standing in the case therefore cannot be construed as covering this metal. In Corson, the nickel content was an essential element. It was present in sufficient quantities to substantially alter the nature of the alloy." And again, "It is not believed that applicant's claims can possibly be construed with sufficient breadth to cover such nickel content or any content sufficient to alter the nature of the alloy."

Having finished the quotations from the Masing & Dahl attorneys, I stated that if Dr. Sobel had anything else to say I would see him in the hall. At this point there was again loud laughter from the audience.

There was one other question from the floor as to the ductility of beryllium, but this does not bear on the discussion with Sobel.

Mr. Sykes' paper on the metallurgy of tungsten followed immediately afterwards. Just before getting to his speech, as he sat in the chair beside me, he said that he thought that we seemed to have about everything in beryllium copper and that he feared his paper was all old stuff to the audience. I told him that I didn't think so as a great many people were still unfamiliar with the metallurgy of tungsten, just as I was. Mr. Sykes then began to present his paper, but on calling for slides discovered some mix-up. A press reporter had meantime sat down beside me and was seeking to obtain a copy of my paper. Having some reluctance about letting him have it, I thought of passing the responsibility to Dr. Burwell and left the meeting room with the reporter to see if I could find Dr. Burwell, while Sykes was finding his plates. In the hall outside I found our Mr. Cobb and Mr. MacIntyre, but could not locate Dr. Burwell. I believe that someone else came up, and then came Dr. Sobel saying that he hoped there were no personal hard feelings; I replied that there were no personal hard feelings, but that I was really surprised at the attitude taken by the Beryllium Corporation. Sobel went on to say that he was sorry to say the things which he did say and sorry to believe them, but that he did believe, and because of it had sold a patent of his to the Beryllium Corporation which he otherwise would not have done. I then asked him whether he regarded the Corson patent as invalid and he replied

that he did not so regard it, but that there were circumstances concerning the interference which were not known and which were kept secret. I asked if these were circumstances which he could not tell me, and he replied affirmatively. I asked if it were something concerning the nature of the interference and he replied affirmatively. I then asked if he considered that the Masing & Dahl patent covered the General Electric Trodalloys and he replied "probably not." I asked why he did not reply, "certainly not" and he replied that he thought that was correct. I then asked if he thought the Masing & Dahl patent covered beryllium copper in which a third metal had substantially altered the characteristic properties. He said there were differences of opinion as to what constituted substantial alteration. I then asked if he did not agree that when the properties were substantially altered the alloy was free of Masing & Dahl patents, and to this he then agreed. I replied that that was all we expected and that he could write that back to his company.

I then asked Sobel if he really believed what he had previously been saying and he replied that he was repeating what had been written to him to say from New York.

I then told him that we had had an opinion from some high-priced attorneys in New York as to the merits of our position, and that he should also write that back to his company.

At this point someone else interrupted and Dr. Sobel faded out of the picture.

I finally gave my original copy of my paper to the press news reporter upon his promise that he would have it back to me this afternoon, because I told him that it was the only one I had with the original corrections.

Later on Dr. Hurd, of Charles Lennig; Dr. Veasey, of Dow Chemical, and Professor Holmes of Oberlin College all commiserated with me over the attack by Dr. Sobel. Professor Holmes was especially outspoken in his resentment of Sobel's attack. Dr. Veasey felt that they could not have any real situation because if they had a real situation they would not act in this way. Dr. Veasey spoke of his work in reducing beryllium chloride with magnesium and the patent which was issued to him on beryllium magnesium alloys. I asked if this patent had expired, and he replied that whether it had or not, he could assure me that infringers would never be prosecuted. Professor Booth, chairman of the American Chemical Society meeting, told me that he did not think much of the other gang because they had made so little progress. Anyhow, he said he didn't like them. Other people, whose names I did not get, also spoke to me along these same general lines.

I forgot to say that somewhere in this conversation, I told Sobel that I had listened to talk of monopoly because of control of the ore supply, and later because of control of all processes, and now finally I was getting damn sick of it.

C. BALDWIN SAWYER.

CUYAHOGA COUNTY,
State of Ohio, ss:

Sworn and subscribed to before me, a Notary Public in and for said county, by C. B. Sawyer, this 29th day of December, 1937.
[SEAL]

MILDRED A. HORA,
Notary Public.

My commission expires February 9, 1939.

The following memorandum is included at this point in connection with Mr. Flynn's testimony on p. 1698.

JULY 20, 1939.

In response to the request of Representative Sumners I have obtained from the Federal Housing Administration a statement of the mortgages on new home construction insured by the Federal Housing Administration. The figures are available from 1935 to 1938, inclusive and I insert them below. The object of these figures is to show that the great bulk of construction in the years affected was financed by the Government and that of the construction privately financed,

a very large percentage of it was made possible by the Government's insurance of construction mortgages.

The total of new building construction in 1935, 1936, 1937, and 1938 was \$10,624,000,000. Of this \$5,426,000,000, or 52 percent, was publicly financed construction and \$5,198,000,000 or 48 percent was privately financed construction. Of the privately financed construction, \$1,035,000,000, or roughly 20 percent, was carried on with mortgages guaranteed by the Federal Housing Administration. This means that roughly 60 percent of all the construction from 1935 to 1938 inclusive was publicly financed or guaranteed.

[Signed] JOHN T. FLYNN.

The following statement is included at this point in connection with testimony on p. 2041, supra.

SIEMENS UND HALSKE, A. G.

Berlin-Siemensstadt, Germany

American Representative: Siemens, Inc., 90 West St., New York City

Incorporated on June 18, 1897, as successors to previous Siemens und Halske companies. Together with its affiliates, Siemens-Schuckertwerke and Elektrizitäts-Aktiengesellschaft (formerly Schuckert & Co.) is the largest electrical equipment manufacturer in Europe.

Plant: The company's principal plants and offices are located in Berlin, Vienna, and abroad. Branches and/or agencies are maintained in all important countries, partly in the form of independent companies through participation with Siemens-Schuckertwerke, A. G.

Capitalization as of September 30, 1937 (in reichsmark):

Common stock.....	100, 590, 000
Preferred stock.....	6, 500, 000

Bonded debt: 98,434,408 reichsmark.

Dividends on common stock:

	Percent per annum
1932-1934, incl.....	7
1935.....	8
1936.....	9
1937.....	10

The German Transfer Moratorium prevented the company from paying certain bonds held outside of Germany at the original maturity on January 1, 1935. In April 1936, the United States district court granted a partial judgment of \$983,790 to the Central Hanover Bank and Trust Co., as trustee for the bondholders. The court ruled that the obligors subjected themselves to the jurisdiction of the United States courts and of the New York courts as to all actions on the bonds, holding that the German Transfer Moratorium is of no legal significance in the courts of the United States of America.

Number of employees: Approximately 157,000 (as of Sept. 30, 1937).

Officers and Directors:

MANAGEMENT: BOARD OF DIRECTORS

Carl Friedrich von Siemens, chairman.	Oskar von Petri.
Hermann von Siemens, deputy chairman.	Oskar Schlitter.
Alfred Berliner.	Friedrich Carl Siemens.
Oscar Caminacci.	Emil Georg von Strauss.
Adolf Franke.	Albert Vogler.
Georg von Graevenitz.	Henry Wright.

BOARD OF MANAGERS

Heinrich von Buol, chairman.	Oskar Sempell.
Richard Diercks.	Richard Schwenn.
Theodor Frenzel.	Erich Thuermel.
Fritz Jessen.	Ludwig von Winterfeld.
Fritz Lüschen.	

The following documents are included at this point in connection with testimony on p. 2098, *supra*.

EXHIBIT No. 1171

[Copy]

THE AMERICAN BRASS COMPANY,
1511 K STREET NW.,
Washington, D. C., September 19, 1939.

The Honorable THURMAN ARNOLD,
Assistant Attorney General, Washington, D. C.

DEAR SIR: During the recent Hearing before the Temporary National Economic Committee you requested we submit at a later date a list of instances where The American Brass Company had followed the price of others. We stated at that time that we could get very fair samples of such for you. Complying with that request we submit herewith a list showing dates and products setting forth instances where companies competing with The American Brass Company have issued prices which were at levels other than those in effect and published by The American Brass Company at those times.

Yours very truly,

THE AMERICAN BRASS COMPANY,
(Sgd.) JOHN A. COE., JR.
General Sales Manager.

Date	Material	Manufacturer
May 29, 1933	Beryllium copper.....	Riverside Metals Co.
May 31, 1933	do.....	Do.
July 5, 1933	do.....	Do.
July 7, 1933	do.....	Do.
Aug. 4, 1933	do.....	Do.
Feb. 19, 1934	Cabbaged scrap.....	Chase Brass & Copper Co., Inc.
Feb. 27, 1934	Quantity schedules copper sheet, rods, etc.....	Revere Copper & Brass, Inc.
Mar. 2, 1934	Copper print rollers.....	Do.
Do.....	Rod and wire prices.....	Seovill Manufacturing Co.
Mar. 3, 1934	Brass rod.....	Chase Brass & Copper Co., Inc.
Do.....	Quantity schedule.....	Seovill Manufacturing Co.
Apr. 2, 1934	Untrimmed cartridge brass.....	Chase Brass & Copper Co., Inc.
Apr. 12, 1934	General price change.....	Revere Copper & Brass, Inc.
Do.....	Beryllium copper.....	Riverside Metals Co.
Do.....	Seamless tube discounts.....	United Wire & Supply Co.
Apr. 13, 1934	Br. Brake lining wire.....	Phelps Dodge Copper Products.
June 6, 1934	Beveling ends of pipe.....	Chase Brass & Copper Co. Inc.
June 28, 1934	Unmarked pipe.....	Chase Brass & Copper Co.
June 30, 1934	Pipe ends.....	American Tube Works.
Sept. 20, 1934	Hot-rolled copper slabs.....	Revere Copper & Brass, Inc.
Oct. 10, 1934	Extras plain extruded forging alloys.....	Titan Metals Co.
Oct. 17, 1934	Quantity schedule condenser tubes.....	Foster-Wheeler Co.
Do.....	Condenser tubes.....	Phelps-Dodge Copper Products.
Nov. 2, 1934	Seamless tubes.....	Wolverine Tube Co.
Nov. 5, 1934	Drawn copper.....	Revere Copper & Brass, Inc.
Do.....	Seamless tubes.....	Bridgeport Brass Co.
Nov. '8, 1934	Pipe—water tube discounts.....	Revere Copper & Brass, Inc.
Nov. 23, 1934	Strip copper.....	Do.
Jan. 14, 1935	Nickel silver flat ware.....	Waterbury Rolling Mills.
Jan. 17, 1935	Redrawing tubes.....	Chase Brass & Copper, Inc.
Jan. 29, 1935	Spoon, fork, and knife stock.....	Seymour Manufacturing Co.
Jan. 31, 1935	Slide fastener stock.....	Do.
Feb. 16, 1935	Knife bolster stock.....	Do.
Mar. 20, 1935	Pipe ends.....	Foster-Wheeler Co.
Mar. 29, 1935	Copper water tubes.....	Revere Copper & Brass, Inc.
May 8, 1935	do.....	Mueller Brass Co.
May 19, 1935	Tinning disc. pipe and copper water tubes.....	Chase Brass & Copper, Inc.
May 20, 1935	Cupro nickel sheet.....	Revere Copper & Brass, Inc.
June 22, 1935	Sheet copper.....	Do.
Apr. 5, 1937	General price change.....	Chase Brass & Copper, Inc.
Nov. 21, 1938	Nickel silver key stock.....	Seymour Manufacturing Co.
Do.....	Nickel silver spoon stock.....	Do.
Dec. 8, 1938	Water tube hot tinning extras.....	Revere Copper & Brass, Inc.
Apr. 1, 1939	Edged strip copper.....	Do.

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INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

HEARINGS

BEFORE THE

TEMPORARY NATIONAL ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

SEVENTY-SIXTH CONGRESS

FIRST SESSION

PURSUANT TO

Public Resolution No. 113

(Seventy-fifth Congress)

AUTHORIZING AND DIRECTING A SELECT COMMITTEE TO
MAKE A FULL AND COMPLETE STUDY AND INVESTIGA-
TION WITH RESPECT TO THE CONCENTRATION OF
ECONOMIC POWER IN, AND FINANCIAL CONTROL
OVER, PRODUCTION AND DISTRIBUTION OF
GOODS AND SERVICES

PART 5-A

FEDERAL TRADE COMMISSION REPORT ON MONOPOLISTIC PRACTICES IN INDUSTRIES

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